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ABSTRACT

The opportunity for grade 5-6 students to explore careers and technology is provided by the curriculum guide, which is a component of Project LET (Learning Experiences in Technology). Inherent in each component is an awareness of careers and the way man does things. The guide is intended to be used as a working copy for professional staff. The integrated teaching units are evolutionary in nature as they are developed from the curriculum, utilizing student involvement and ideas. Unit topics include: anthropology and archaeology, city planning, crafts history and products, earth study, ecology, communications, homemaking, human biology, magnetism and electricity, political system, producing and retailing, scientific reasoning, seasonal projects, theater, and writing music. (Author/VA)

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ED112187

Learning Experiences in Technology

INTEGRATED TEACHING UNIT HANDBOOK

(VT 101 982)

Book III
for
Grades 5 and 6

LEARNING EXPERIENCES IN TECHNOLOGY

CE 005 205

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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School District of the City of Royal Oak
4000 Crooks Road, Royal Oak, Michigan 48073
June 1973

PREFACE

This guide is intended to be used as a working copy for professional staff. It is not a completed document but a working draft which will be revised at the end of the 1973-74 school year. This document cannot stand alone but is designed to be used with in-service education and our "Project LET, Guide for Implementation."

The methodology used to implement the concepts of Project "LET" is the Integrated Teaching Unit. These Integrated Teaching Units are evolutionary in nature as they are developed from the curriculum, utilizing student involvement and ideas. They are continually being implemented, evaluated, and revised by the classroom teacher. The duration of each teaching unit varies to allow for flexibility, individuality, creativity, and fulfillment of the needs and interests of each child.

Each unit evolves from the existing elementary curriculum which includes the following components:

1. general overview
2. teaching/learning resources
3. concepts
4. behavioral objectives
5. methods of implementation
6. resource people and materials
7. student activities

Inherent in each component is an awareness of careers and the way man does things. The additional content provided for children in the "LET" classroom is the opportunity to explore careers and technology through the utilization of the Integrated Teaching Unit, parent and community resource people, and exposure to numerous careers.

TABLE OF CONTENTS

UNIT NO.

1. Anthropology and Archaeology:
    Cultural Studies:
        Ancient Egypt
        Ancient Greece
        Indians
    Tools

2. City Planning and/or Construction

3. Crafts-History and Products

4. Earth Study:
    Air and Weather
    Geology
    Oceanography
    Water

5. Ecology

6. Exploration of Creative Writing Forms

7. Graphic Communications - Books and Newspapers

8. Homemaking

9. Human Biology

10. Magnetism and Electricity

11. A Political System

12. Producing and Retailing:
    Newspaper Drive
    Production and Retailing
    UNICEF

13. Scientific Reasoning

14. Seasonal Projects

15. Theatre

16. Writing Music

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: ANTHROPOLOGY AND ARCHAEOLOGY

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this Anthropology and Archaeology section, the following Integrated Teaching Units have been combined and/or presented as a tentative guide for ideas in, application to or relevance to the upper elementary classroom:

Cultural Studies
Ancient Egypt
Ancient Greece
Indians

Tools
History and uses of

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Cultural Studies -
Book: Social Sciences: Concepts and Values, Book 6, Chapter 1
Movie: Ari, Boy of Greece (Royal Oak film library)
Record: Interview with anthropologist Dr. Margaret Meade (Royal Oak IMC)

Tools -
Books: ABC's of Hand Tools - General Motors Corporation
Carpentry for Children - Leavitt
Children Study American Industry - Gilbert
Doing Work - Blaugh
Technology for Children - Scobey
This is Automation - Hirsch
Time Life Series on Development of Tools
World of Work Encyclopedia
Movies: ABC's of Hand Tools
Fossils are Interesting
Greenfield Village Movie
History of Living Things
Filmstrips: New Stone Age
Old Stone Age

2. Field Trips:

Cultural Studies -
- Arkona, Ontario, Canada (Fossils)
- Cranbrook Science Museum
- Greek Town (Detroit)
- Waterloo Recreation Area Gravel Pit (Fossils)

Tools -
- Greenfield Village
- Lumber yard
- Walk to construction site
- Walk to various businesses to observe uses of tools
- Woodworking shop

3. Human Resources

Cultural Studies -
- Anthropologist
- Archaelogists
- Lapidary

Tools -
- Carpenter

4. Activities

Role playing -
- Anthropological survey of peoples racial stock, attitudes, social status, housing types, etc.

Role playing -
- Pre-historic man depicting his culture
- Making puppets, models, sun dials, pottery, mummies, water-carriers, pyramids, masks, dolls, dioramas, and wooden objects

UNIT TITLE: CULTURAL STUDIES

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Studies	
A comparison of cultures:	
Clothing	Describe clothing (of various societies under study)
Housing	Compare homes
Food	Enumerate foods
Climate	Differentiate between climates of various societies under study
Geographic location	Recognize geographic locations on a map or globe
Tools	Differentiate between tools of various societies
Religious beliefs	Differentiate between religious beliefs
Social structure	List social structures
Norms of behavior	Distinguish between norms of behavior
Training of children	Describe training of children in each society
Government	
Science	
Animals	List animals common to society under study
Preservation of materials	Differentiate between methods of preserving materials

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Research and simulate tools, homes, clothes and foods of various societies	
Make pyramids, Make a kayak	
Make a water carrier	
Make mummies - make kachina dolls - make masks	
Have an archaeological dig	

UNIT TITLE: CULTURAL STUDIES (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Math	
History of measurement	Tell what each society contributed to the history of measurement
Language Arts	
Research	Locate information concerning each society
Note taking	Generalize from gathered research information
Outlining	Reorganize research information
Reporting	Report information via oral and/or written reports

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Make sundials	

UNIT TITLE: CULTURAL STUDIES (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers	
People and their job roles:	Identify jobs within various societies Recognize and identify tools used within each society Discuss the necessity of the job
Producing	List various products used by each society
Servicing	List services provided to the society

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS

UNIT TITLE: TOOLS

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Studies	
History	Investigate, gather data, and compare tools through the ages
Application	Manipulate properly a saw, hammer, dremel saw, T square, clamp, drill
Math	
Measurement	Measure piece of wood, and measure accurately in 1/4" and 1/8" sections
Planning	Prepare a design for the assembly of an object
Careers	
People and their job roles	Describe at least five jobs requiring the use of tools

METHOD OF IMPLEMENTATION	[illegible]
Practice use of tools with wood scraps	
Trip to lumber yard Trip to a construction project	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ANTHROPOLOGICAL OBSERVATIONS

II. ACTIVITY FORMAT:

A. Tools and materials

Pencils
Paper

B. Procedures for this activity (with helpful hints)

1. a. Observe one neighborhood block to determine size of houses, condition, type of construction; or

   b. Observe people of one neighborhood block to detect type of clothing, house, car, etc.; or

   c. Observe people's behavior on one neighborhood block to determine prevailing moods, attitudes; or

   d. Observe people's physical characteristics on one neighborhood block to determine their racial stock(s).

2. Construct a bar, line, circle or distribution curve graph to represent observations made in the field (step 1).

3. Attempt to interpret graph representations into human attitudes, values, social class, racial stock (whichever is pertinent to type of observation made).

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. **NAME OF ACTIVITY**

MAKING EXAMPLES OF FOSSILS

II. **ACTIVITY FORMAT:**

A. Tools and Materials

- Pails
- Mixing sticks
- Plaster of Paris 10#
- Small milk cartons
- Vaseline
- Water
- Newspapers
- Small objects (toys, etc.)

B. Procedures for this activity (with helpful hints)

1. Rub a coating of vaseline on small objects to be "fossilized"
2. Pour plaster of paris into 8 ounce milk cartons
3. Let harden until slightly firm
4. Depress objects into plaster of paris
5. Remove object when plaster of paris is firm
6. Let sit over night
7. Rub a coating of vaseline over "mold" formed
8. Pour about 1 inch of plaster of paris to make "cast"
9. Let harden (about one hour
10. Pull mold and cast apart

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING KACHINA DOLLS

II. ACTIVITY FORMAT:

A. Tools and Materials

Toilet tissue rolls	Plain fabric
Feathers	Printed fabric
Leather	

B. Human Aides and Resources

Art Teacher

C. Procedures for this activity (with helpful hints)

Using toilet tissue rolls as a base for dolls, students can make kachina dolls. Page 62 of Social Studies: Concepts and Values (Grade 5) shows three dolls and pupils may enlarge upon those ideas.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ARCHAEOLOGICAL DIG

II. ACTIVITY FORMAT:

A. Tools and Materials

Large plastic bag
Waste paper from separate room

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Empty contents of different rooms waste paper baskets in plastic bag.

2. Student must dig for finding and list concrete reasons for placement in each particular booklet.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING MUMMIES

II. ACTIVITY FORMAT:

A. Tools and Materials

Newspaper
Wheat paste
Sheeting
Water
Coat hangers

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Make form of mummy from coat hanger
2. Mix wheat paste - stuff coat hanger with wads of newspaper, then with strips of newspaper coated with wheat paste, make layers to cover form of the mummy.
3. Make several layers of the strips of newspaper.
4. Final layer should be made with strips of sheeting.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

REPORTS ON OCCUPATIONS

II. ACTIVITY OF FORMAT:

A. Tools and Materials

Chalk board
Paper
Pencils
Books on occupations

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Brainstormed occupations
2. Narrowed down list later
3. Choose job they wanted to explore
4. Outlined what they wanted to know
5. Researched
6. Wrote rough draft
7. Wrote final copy
8. Presented findings to class

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING PRE-HISTORIC WORKING MODEL TOOLS

II. ACTIVITY FORMAT:

A. Tools and Materials

Tool panel compliment
Sticks
Flat rocks

Twine
1/2 inch doweling

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

Hammer

1. Cut stick to length for hammer handle
2. Select flat rock for head
3. Tie rock to handle with twine

Bowdrill

1. Cut doweling to length for drill
2. Sharpen end of drill
3. Make bow of twine and a thin strip of wood or a small diameter stick

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MURAL - PAINTING MURALS OF DEVELOPMENT OF TOOLS

II. ACTIVITY FORMAT:

A. Tools and Materials

Assorted brushes	Tempora paint
Old coffee cans	Paper
Smocks for children	

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Preplanning murals
2. Organizing material needed
3. Paint mural

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

THE MAKING OF A FAMILY

II. ACTIVITY FORMAT:

A. Tools and Materials

Paper, etc.
Boxes
Scissors
Paste

B. Human Aides and Resources

Parents and relatives

C. Procedures for this activity (with helpful hints)

Discuss "Family Tree"
Discuss careers of family
List questions to ask -
    Why in jobs?
    What knowledges, skills and attitudes needed?

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT PLANSHEET

TITLE: CITY PLANNING AND/OR CONSTRUCTION

GRADE LEVEL: 5-6

GENERAL OVERVIEW: This unit encompasses city planning and/or construction.

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Books: World Almanac
Encyclopedias
Social Science Texts
Trade Books

Maps: City plans of Royal Oak
City plans of other cities
Road maps

Slides: Famous and/or relevant sections of American cities

Suggested Specific: Read Unit 2 of The Social Sciences: Concepts and Values, Harcourt Brace Jovanovich

2. Field Trips:

Walk around neighborhood
Trip to city hall
Trip to another city - unlike their own (for comparisons and contrasts)

3. Human Resources:

City planner
Travel agency representative
People from other cities to discuss their cities

4. Activities:

Roleplaying: Taking on the roles of various city officials' jobs
Bring an architect and design a city

Hands-on Activities:

- Reading maps
- Taking an imaginary trip using maps
- Designing their own street
- Designing and making to scale on plywood, their own cities
- Making sketches of possible city plans

Other: Identify 20 cities in the United States, including their locations, the chief occupations of the people in the city and the populations of the cities.

UNIT TITLE: CITY PLANNING

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Sciences	
People who work in a city	List 5 occupations pertinent to city employment
Why cities grow where they do:	List 5 reasons why cities grow where they do
urban growth and decay	Identify 2 characteristics of urban slum areas
suburban development zoning laws	Identify one reason for the existence of suburban areas
Different kinds of cities	List 5 different kinds of cities according to prime importance or fame
Chief occupations Locations of cities Correlation of city location and chief form of industry	Recognize and cite evidence for a relationship between locations and major occupations of a city.
Science	
Interrelationship between a city and its natural resources	Discuss why natural resources are important to a city.
Physical outlay of city Symmetrical construction of city	Plan and build or construct a model city using glue, wood, styrofoam or such available materials.

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Speaker - city planner	
Speaker - city planner	
Design and construct to scale cities of plywood, styrofoam, glue, etc.	
Write a report on cities, their locations, chief occupations and populations	
Design and construct to scale cities of plywood, styrofoam, glue, etc.	

UNIT TITLE: CITY PLANNING (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each pupil will be able to:
Math Measurement scale Size (population, area)	Draw to scale a city of his own design Measure the necessary amount of [illegible] needed for the city transportation
Language Arts Printing Labeling Spelling Reading Note-Taking Reporting Writing	Make name-plates [illegible] for streets and buildings Write a [illegible] [illegible]; gather data [illegible] and write a report on [illegible]

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS

UNIT TITLE: CITY PLANNING (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers People and their job roles Managing Producing Servicing	Identify main type of work performed in each of the following occupations: city planners construction contractor construction engineer construction worker researcher

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Speaker - city official Roleplay various jobs in a city	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

DESIGNING AND MAKING A SCALE MODEL OF A CITY

II. ACTIVITY FORMAT:

A. Tools and Materials

1/4" plywood
paint
shellac
rulers
woodburners
saws
clamps
goggles
graph paper

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

Design city on graph paper.
Alter scale to piece of plywood.
Put in city buildings.
Put in residential areas.
Name city.
Paint, woodburn, etc., city to highlight certain areas.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT PLANSHEET

TITLE: CRAFTS - HISTORY AND PRODUCTS

GRADE LEVEL: 5-6

GENERAL OVERVIEW: This section includes units of study relating to crafts during various periods of history.

TEACHING/LEARNING RESOURCES:

1. Reference Materials:

Films: (available from IMC)
Autobiography of a Man
Beginnings and Growth of Industrial America
Biography of a Chair
The Cotton Farmer
Discovering Texture
*Greenfield Village
*Henry Ford Museum
Life in a Medieval Town
Medieval Manor
Medieval Times: Guilds & Trades
What Is Automation
Why Man Creates

*Available free from Greenfield Village

Filmstrips:
Castle Life
Cotton Spinning and Weaving
Fair-Medieval, The
How Industry Began
Learning About Indian Crafts
Medieval Manor
Medieval Towns & Cities
Town
Town & Its Guilds

Realia:
Candle-snuffer
Candle-mold
Loom
Christmas Tree Candle Holder
Cotton from Plant to Product

Books:

Exploring the Old World, Ahesihwede
Human Adventure, The, Cappelluti and Grossman
Made in the Middle Ages
Medieval Days and Ways
Principles and Practices in the Teaching of Social Sciences, Books 5 & 6, Harcourt, Brace & Jovanovich
Teaching Children About Technology, Scobey, pp. 307-8, pg. 348

Newspaper:

Detroit News - Nov. 28, 1971 Good Earth Almanac

2. Field Trips:

- Trip to a lumber yard
- Greenfield Village
- Plant - Ford Motor Company
- Detroit Institute of Arts
- The Weavery

3. Human Resources:

- Parents with weaving skills, looms, etc.
- Students from Macomb College
- Guides and Craftsman at Greenfield Village
- Art Teacher

4. Activities:

- Role Playing
  - Apprentice
  - Journeyman
  - Craftsman
  - Assembly line worker
  - Quality control man
  - Packager
  - Company sales manager
  - Advertising manager

- Hands on activities
  - Candle-making
  - Carpentry
  - Weaving
  - Soap making
  - Brick making
  - Tapestry making
  - Design a wall hanging
  - Weave a belt
  - Make loom
  - Tic tac toe boards
  - Make printing sets
  - Tin Smiths

UNIT TITLE: CRAFTS - HISTORY AND PRODUCTS

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Science	
Middle Ages	List 5 reasons why the middle ages were important
How goods are produced	List 3 characteristics of the raw material they used to make a product
American Heritage (Greenfield Village)	List 5 facts about Greenfield Village List 5 facts about Henry Ford Museum
Economics	Compute cost/profit relationship for each product made
Crafts	Discuss critically the importance and the utilization of each craft with which each child became involved
Math	
Measuring	Accurately measure the materials necessary for each product to be made
Geometry	Plan and prepare geometric patterns
Money	Accurately make change for products sold

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Trip to Greenfield Village and Henry Ford Museum Keep records of cost of materials and sales Group discussion	
Make each individual project and/or product Sell objects	

UNIT TITLE: CRAFTS - HISTORY AND PRODUCTS (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Language	
Writing plans	Formulate plans necessary to make each product
Reports	Relate through the written or oral word, how each product is produced and used
Following directions	Interpret directions necessary for a product to be made
Letter - Writing	Distinguish between and write accurately an invitation, a thank-you note and a letter to people directly involved in the implementation of the unit
Art	
Texture	Identify, differentiate and use varying textures within products made
Colors	Compare and contrast colors necessary to make an attractive, saleable item

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Write various forms of written communication	
Let students experiment with color and texture before making their product	

UNIT TITLE: CRAFTS - HISTORY AND PRODUCTS (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers	
People and their job roles:	
Producing	Make a product from raw materials through the packaging process
Servicing	Distribute, advertise, sell and repair each product he has made
Personnel	Identify working conditions necessary for each job station of products and services produced to be made
	Compare and contrast the economic rewards gained through each occupation involved in making a product
Tools	Describe and distinguish between the characteristics, tools and importance of each craftsman and his job

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Through: 1) dial discussion 2) written reports 3) oral reports 4) pictures	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

INKLE LOOM

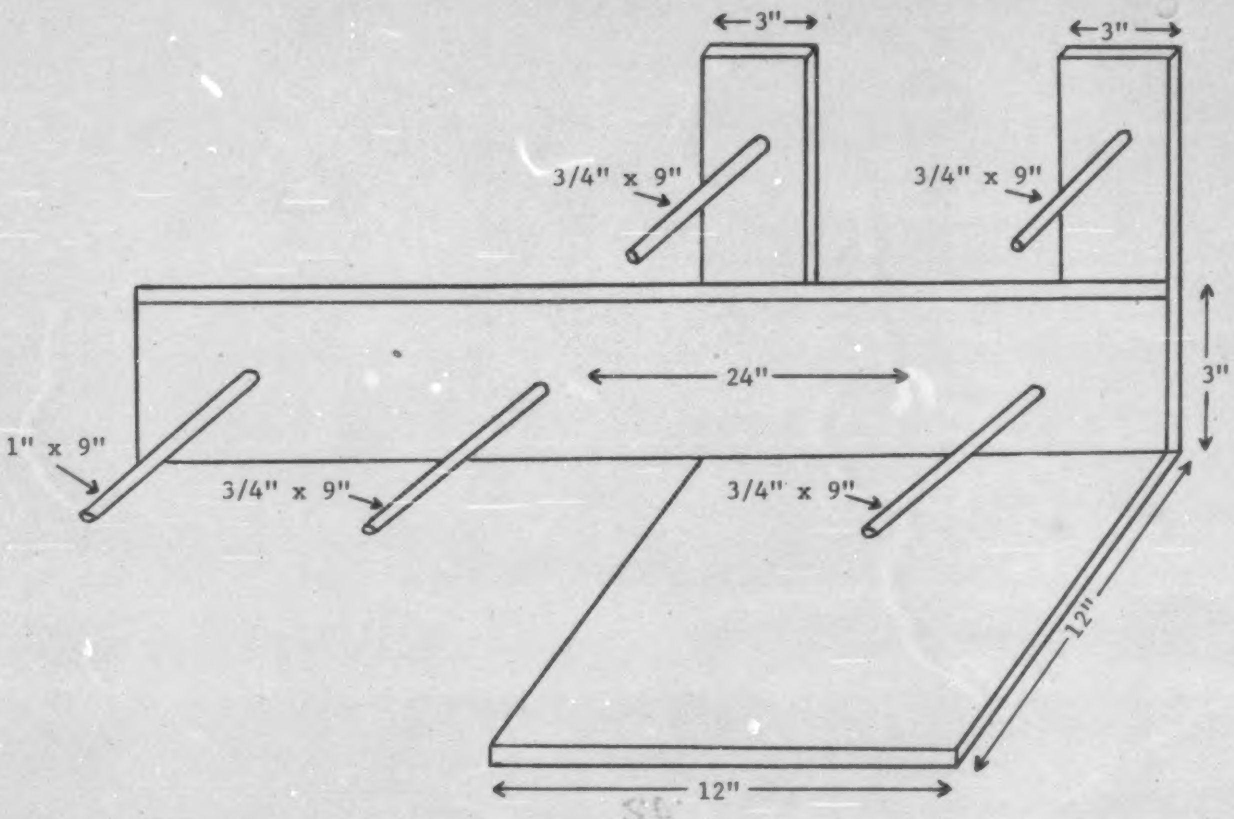
II. ACTIVITY FORMAT:

A. Tools and Materials

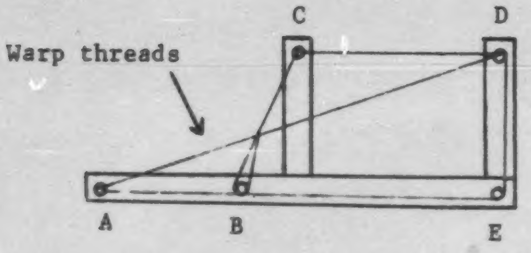
Tool Panel compliment
Materials for drawing (pine)

B. Procedures for this activity (with helpful hints)

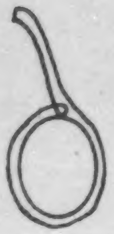
1. Cut four dowels each 9" x 3/4"
2. Cut one dowel 9" x 1"
3. Cut two boards 3" x 3/4" x 10"
   one 12 x 12 base
4. Cut one board 3" x 3/4" x 24" long
5. Drill 4 (four) 3/4" holes as shown
6. Drill one 1" hole as shown
7. Glue and nail pieces together
8. Insert dowels with glue



Basic Threading of Warp



Heddles = 12" strings, tied in a loop,
attached to dowel in this manner



Attach 9 heddles
(white cotton string)
to dowel 8" as shown

Thread first warp string (yarn) through loop of heddle, over dowel C, around D and E, back to A. Tie end.

Second warp string goes next to heddle, not through, around dowels D and E, back to A. Tie end.

Continue in this manner to thread 17 warp strings, using 9 heddles.

To Weave:

Place loom in front of you with open edge on your right. With left hand, raise up all the warp threads directly in back of heddles until you see a definite opening between layers of threads. This is called an "up shed". Weave through, using yarn wrapped around cardboard. Next press down threads in back of heddles. This is a "downshed". Weave back through. Place right hand in between layers and "beat down" (pack threads closer together). Continue in this manner, pulling threads toward you until length desired. Untie knots to remove.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CANDLE-MAKING (SAND CASTING)

II. ACTIVITY FORMAT:

A. Tools and Materials

Burner
Double Boiler
Tin Can
Wax
Paper cones
Wicking
Sand (not fine)
Sticks

B. Procedures for this activity (with helpful hints)

1. Put moist sand in box
2. Put one cone in sand, point down
3. Remove cones; sand should retain shape of cone
4. Insert wicking (across paste-stick) into sand mold
5. Pour wax into mold
6. Allow wax to cool and solidify
7. Remove candle from sand

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CANDLE-MAKING (MOLDING)

II. ACTIVITY FORMAT:

A. Tools and Materials

Hot plate
Double boiler
String
Molds
Wax
Stearic acid
Crayons for coloring wax
Scent
Candle wicking
Vegetable oil
Paste sticks
(for multiple
(batch

B. Procedures for this activity (with helpful hints)

1. Melt wax
2. Coat molds with vegetable oil
3. Cut wicking and tie to paste sticks
4. Dip wicking into wax; return wicking to mold
5. Add scent to wax
6. Pour wax into molds
7. Let stand overnight
8. Release candles from molds
9. Wipe off vegetable oil from candles

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CANDLE DIPPING

II. ACTIVITY FORMAT:

A. Tools and Materials

Double burners
Hot plate
Staplers
Plastic bags for packaging
Construction paper for labeling
Nails
Paraffin wax
Wicking
Scent
Colored crayons
Wax hardener

B. Procedures for this activity (with helpful hints)

1. Melt paraffin, scent and wax hardener in double boiler over hot plate
2. Pupils stand in revolving circle, dipping candles when passing melted wax
3. Decorate by carving, pasting labels, etc.
4. Package and label finished product
5. Sell finished product

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING AND DESIGNING SHIELDS

II. ACTIVITY FORMAT:

A. Tools and Materials

Saws
Scissors
Paintbrushes
Woodburning Set
Oaktag
Corrugated Cardboard
Plywood

B. Procedures for this activity (with helpful hints)

1. Research history of shields
2. Draw rough draft on oak tag
3. Cut pattern from oak tag
4. Trace pattern on corrugated cardboard
5. Cut out design
6. Paint design
7. Let dry
8. Varnish shield

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING TAPESTRIES

II. ACTIVITY FORMAT:

A. Tools and Materials

Needles
Scissors
Burlap
Scrap material
Yarn
Thread
Glue

B. Procedures for this activity (with helpful hints)

1. Design pattern
2. Cut out pieces of material needed or coded colors of yarn
3. Work yarn or material pieces on burlap

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING SMALL WOOD OBJECTS (KEYCHAINS, PENCIL HOLDERS, ETC.)

II. ACTIVITY FORMAT:

A. Tools and Materials

Sandpaper
Hammers
Saws
Chisel
Wood scraps
Paint
Glue
Paste-sticks

B. Procedures for this activity (with helpful hints)

1. Make pattern for object to be made
2. Trace pattern on wood
3. Carve wood
4. Sand wood
5. Paint finished object

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING SOAP

II. ACTIVITY FORMAT:

A. Tools and Materials

Pyrex mixing bowl
Spoon
Hot plate
Cotton sheet
Newspapers
Old blanket
Wooden frame (to pour soap into)
1/4 pint cold water
(6) 1/2 ounce of lye-flake form 3 pound tallow or lard

B. Procedures for this activity (with helpful hints)

1. Follow directions on can of lye for making soap
2. Or consult *Teaching Children About Technology*, Scobey, pp. 362-4
3. Or consult *Detroit News*, January 9, 1972 - Good Earth Almanac

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING WALL HANGINGS

II. ACTIVITY FORMAT:

A. Tools and Materials

Burlap
Crewel needles
1/2" Doweling
Yarn

B. Procedures for this activity (with helpful hints)

1. Draw design first on sheet of paper
2. Approval of design by teacher
3. Procure material from teacher (burlap and yarn)
4. 1 1/2" hem in top of each hanging sewn with sewing maching
5. Steam press each hanging
6. Insert doweling

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

LOOPER-WEAVING LOOM

II. ACTIVITY FORMAT:

A. Tools and Materials

Ruler
Saw
Cutting pliers
Hammer
Miter Box
6 d finishing nails
3/4" x #16 Wire brads (1 pound per 10 students)
1" x #18 Wire brads (1 1/2" for corners)
2 pieces soft wood 3/4" x 3/4" x 7 1/2"
2 pieces soft wood 3/4" x 3/4" x 9"
2 pieces hardboard or plywood 1/8" x 2" x 2"

B. Procedures for this activity (with helpful hints)

1. Using 6 d finishing nails, nail soft wood frame together
2. Cut 2" square of hardboard diagonally in half and nail the triangles across corners with 3/4" x #16 wire brads
3. Lay out and mark 20 equally spaced points on each side of the frame
4. Drive a #18 wire brad at each point, leaving 1/2" of the brad sticking up
5. Using a piece of coat hanger wire about 12" long, shape a weaving hook

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ALUMINUM FOIL EMBOSSING

II. ACTIVITY FORMAT:

A. Tools and Materials

Depression instruments (paste sticks, pencils, meat picks, popsicle sticks)

B. Procedures for this activity (with helpful hints)

1. Make rough draft on paper of tentative product
2. Make copy of pattern in aluminum plates and pans
3. Depress design in tin
4. Paint over designs with black poster paint
5. Wipe excess paint off

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

RELIEF PRINTING

II. ACTIVITY FORMAT:

A. Tools and Materials

Brayer
Exacto-knife
Printing ink
Corrugated cardboard
Large sheets of white paper
Newspapers
Glue

B. Procedures for this activity (with helpful hints)

Make pattern for design
Cut out pattern from corrugated cardboard
Glue pattern to another piece of corrugated cardboard
Spread ink (from tubes) on a piece of newspaper
Roll brayer in ink
Roll inked brayer over corrugated cardboard pattern
Remove "printed" paper

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

WEAVING (MAKING A WAFFLE WEAVE)

II. ACTIVITY FORMAT:

A. Tools and Materials

Saws	Scrap wood
Hammers	String
Nails	Yarn

B. Procedures for this activity (with helpful hints)

Saw plywood into pieces 10" x 2" x 1/2"
Nail sides together
On opposite sides 1/2" apart, nail small nails
Attach string to nails
(Refer to Teaching Children About Technology, Scobey, p. 348)

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: EARTH STUDY

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this earth study section, the following integrated teaching units have been combined and/or presented as a tentative guide for ideas in application to or relevance to the upper elementary classroom:

Air and Weather
Geology
Oceanography
Water

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: AIR & WEATHER

GRADE LEVEL: 5-6

TEACHING/LEARNING RESOURCES:

1. Reference materials:

   Books: Science Texts
   Trade Books
   Library Books
   National Weather Service will provide used weather maps

2. Field Trips:

   National Weather Service,
   Metropolitan Airport

3. Human Resources:

   Weatherman
   Science teacher

4. Activities:

   Role-playing
   Weather forecasters using instruments made by the students

   Construct Barometer
   Construct Anemometer
   Construct Wind Vane
   Construct Hair Hygrometer
   Construct Card File
   Interviewing a Weatherman

UNIT TITLE: AIR & WEATHER

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Sciences	
Maps and Globes	Identify and read a weather map and from it accurately predict weather
	Construct a map showing geographical relation to climate
Science	
Instruments	Recognize and define common terms associated with weather
	Identify a minimum of five weather instruments describing accurately how they operate and what they measure
	Manipulate correctly five weather instruments
	Interpret findings from weather instruments and formulate weather predictions from findings
	State five reasons for the need of accurate weather predictions
	Construct and demonstrate a weather instrument
Clouds	Differentiate between types of clouds and their effect upon weather
Atmosphere	Differentiate and diagram layers of the atmosphere

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Have weather maps available practice reading them	
Make and use weather instruments Research, identify and discuss various cloud formations; layers of the atmosphere	

UNIT TITLE: AIR & WEATHER (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Math	
Measurement calculation	Interpret, compute and record information from weather instruments
Language Arts	
Writing	Make a log and record daily weather findings
Interviewing	Discuss critically weather concepts with a weatherman by first preparing questions for the interview
Vocabulary	Define vocabulary words, alphabetize and file them
Art	
Collage	Gather weather pictures and reorganize them to make a collage

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Invite weatherman into the classroom	
Gather pictures from old newspapers and magazines	

UNIT TITLE: AIR & WEATHER (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers	
People and their job roles:	Identify and discuss job roles of those people who work at a weather station
Functions Locations Tools Characteristics	Prepare a chart of relationships of various careers to weather
Management	
Planning Organizing Controlling	Identify and discuss job roles of those people who work for radio and TV in the area of weather
	Identify those management functions required of a weather station
	Role play a hiring position for a job in a TV station

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Invite people connected with weather careers into the classroom	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ANEMOMETER

II. ACTIVITY FORMAT:

A. Tools and Materials

coat hanger
milk carton
medicine dropper
four pointed paper cups
paper clips or stapler

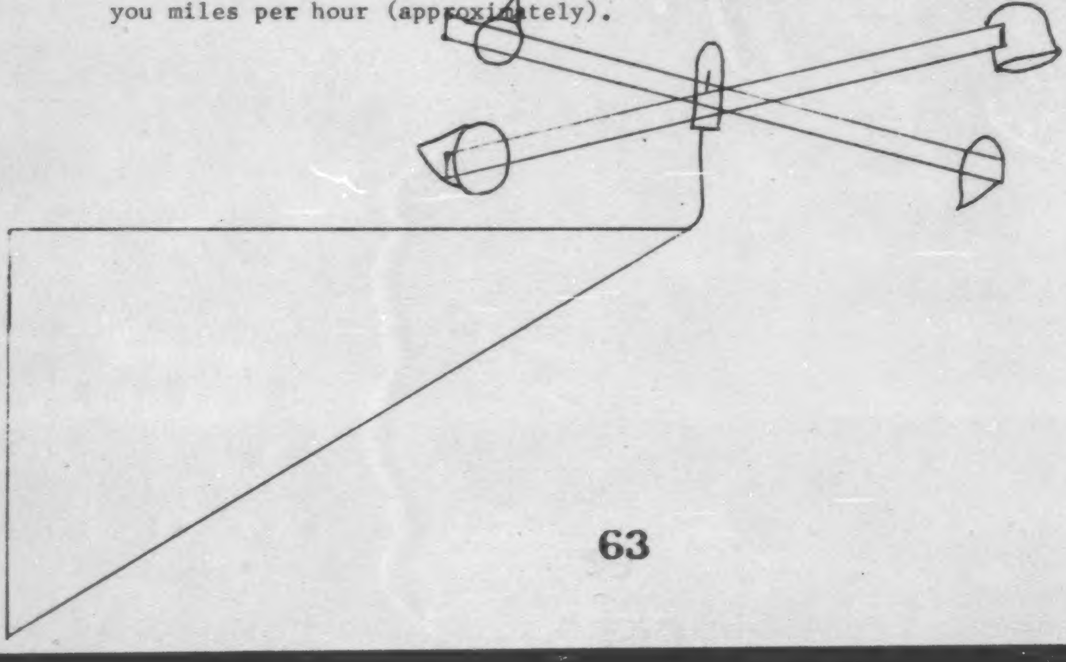
B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Untwist hanger. Break off crooked ends. Bend into shape. (see diagram) Holding medicine dropper by rubber bulb, melt glass tip over flame or burner. Tip should be closed. Allow to cool. Cut 4 strips, one from each corner of milk carton, about 3/4" from corners. These are the arms. Make large colored circle on one cup (to count the terms). Cut 2 slots 3/4" wide, in each of the paper cups. Slip folded strips into slots of cups, one to each. Take off rubber bulbs, fasten arms to dropper with clips. Slip dropper over upright wire.

III. Results of this activity (after implementation)

Count number of turns in 30 seconds, divide by 5, and that will give you miles per hour (approximately).



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BAROMETER

II. ACTIVITY FORMAT:

A. Tools and Materials

milk carton
small tin can
balloon
thread
needle
broomstraw
4x6 card
glue
paper clip
rubber band
penny

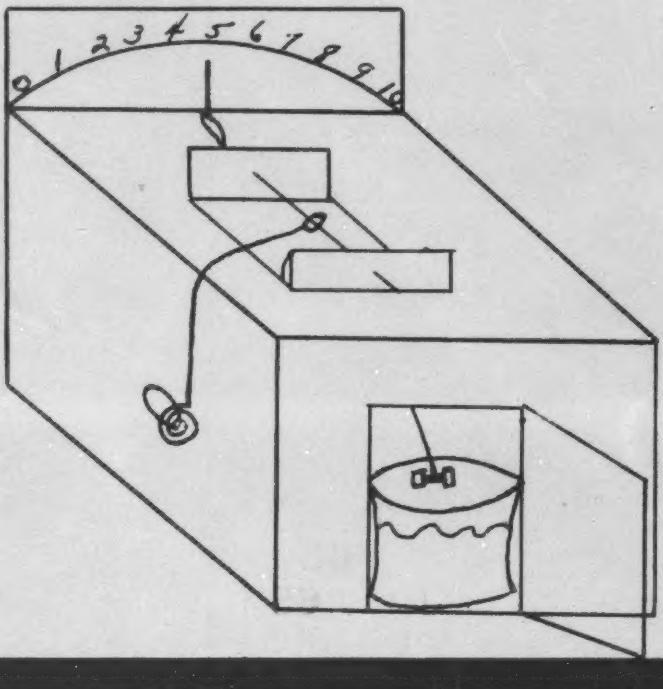
B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Fold in open end of carton (becomes bottom). Cut H slit on top of carton, fold up flaps, insert needle through flaps. Glue 4" broomstraw into eye of needle. Cut door in front. Stretch balloon piece over tin can, fasten with rubber band. Attach thread to balloon with tape. Run thread up through H, wrap around needle twice, hang down over the side and attach penny and clip for weight. Make gauge with degrees, attach to back with tacks. See diagram.

III. Results of this activity (after implementation)

Most barometers worked well enough to register some change on the gauge.



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

HAIR HYGROMETER

II. ACTIVITY FORMAT:

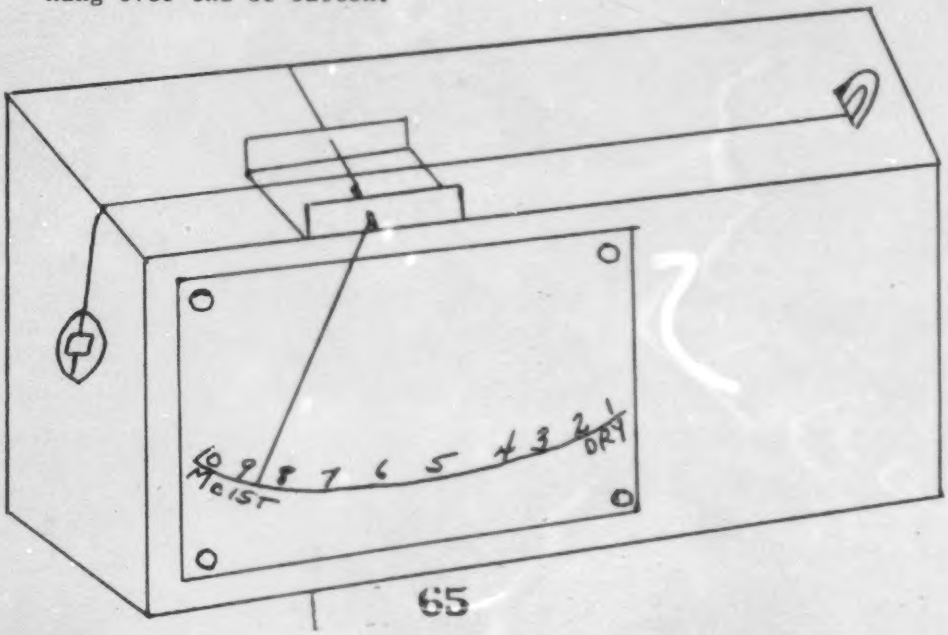
A. Tools and Materials

milk carton
needle
broomstraw
scotch tape
penny
glue
a hair - 9"
thumbtacks
blank card
paper clip

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Wash the hair.
Cut an "H" on one side of the carton.
Bend two tabs up and punch hole in each with needle.
Split off broomstraw about 3" long. Put one end through eye of needle and glue it there.
Cut narrow slit at far end of carton, push paper clip in halfway.
Draw half circle on card and print as shown.
Thumbtack to card.
With tape fasten one end of hair to penny.
Place needle and straw into holes in "H" tab.
Wind hair around needle, one turn from underneath and around. Glue free end of hair onto paper clip. The penny should hang over end of carton.



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

WIND VANE

II. ACTIVITY FORMAT:

A. Tools and Materials

medicine dropper
milk carton
coat hanger
paper clips
staples

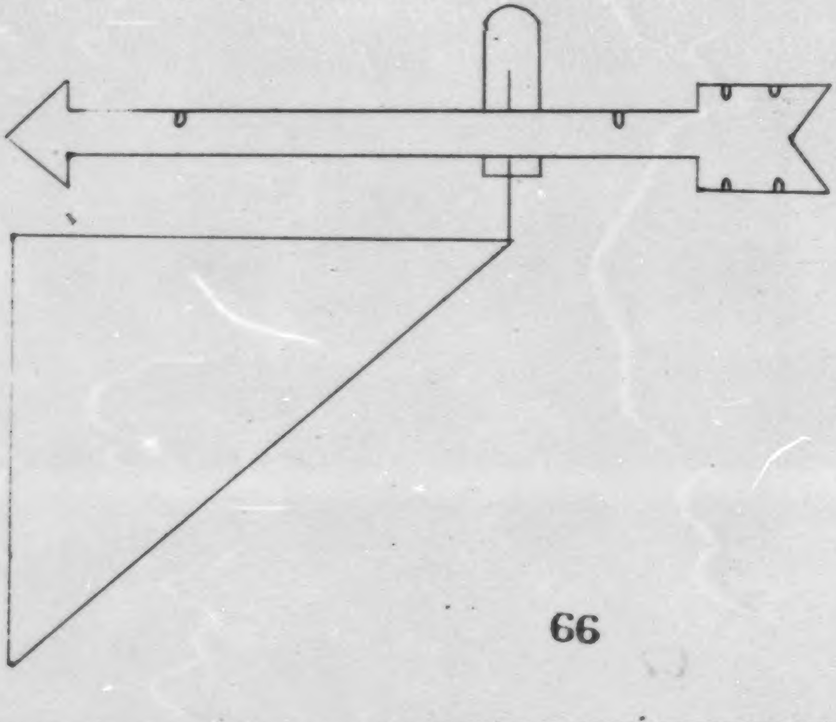
B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

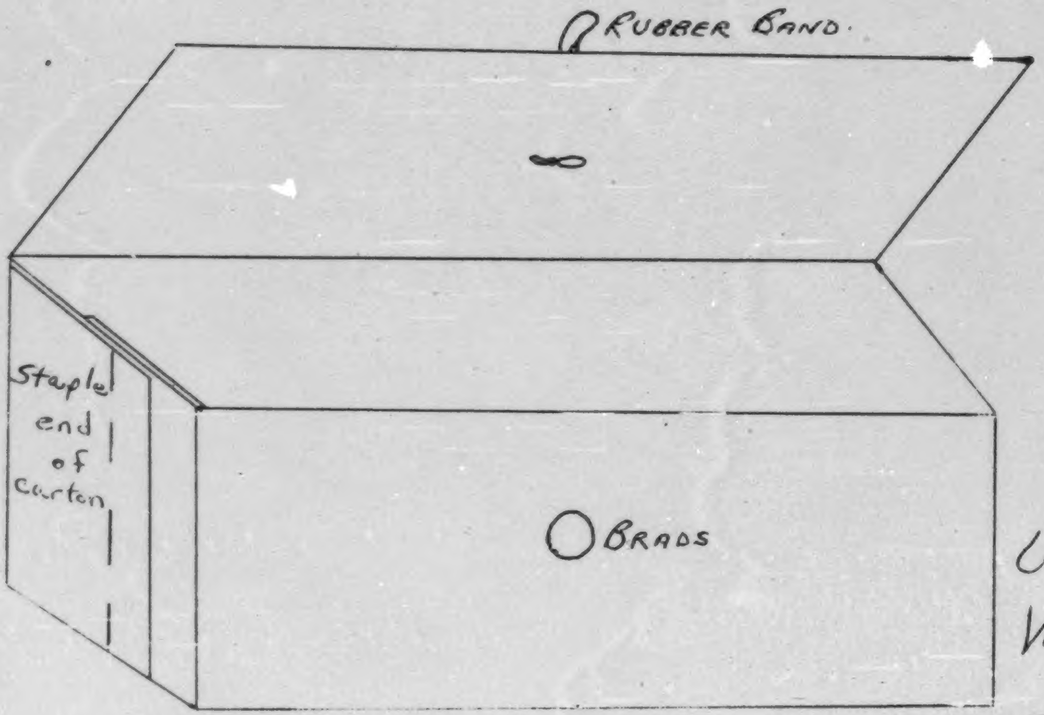
Make a coat hanger bracket just like the one for anemometer. Prepare medicine dropper in the same way. Cut a double strip of paper from corner of carton, similar to anemometer, but 2" away from the corner. Cut in shape of arrow. Push tube of dropper between 2 parts of the arrow, closer to the point than tail. Fasten with paper clips or staples.

III. Results of this activity (after implementation)

It will point to the direction from which the wind is blowing because the tail is larger and catches more wind.



CARD FILE - MILK CARTON


RUBBER BAND.
Staple end of carton
BRADS

USE FOR
VOCABU-
LARY -
GLOSSARY

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT PLANSHEET

TITLE: GEOLOGY

GRADE LEVEL: 5

TEACHING/LEARNING RESOURCES:

1. Reference materials:

   Books: Science for the Elementary School, Victor
   Probe (Educational Services of Michigan)

2. Field Trips:

   Rock quarry - Chelsea, Michigan
   Arkona, Ontario - Rock quarry
   Sylvania, Ohio - Rock quarry
   Miner's Den Rock Shop - Royal Oak

3. Human Resources:

   Parents
   Jeweler
   Lapidary

4. Activities:

   Rock collection
   Make a volcano
   Reports
   Grow crystals
   Make a sedimentary rock
   Make a fossil

UNIT TITLE: GEOLOGY

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Science	
Rocks	Recognize and identify the three major rock groups
Changes in the earth's surface	Distinguish between formation of three major rock groups
	Relate and differentiate between the forces that change the earth's surface
Interdependence of man and earth	List ways in which man depends on the solid earth
Language Arts	
Brainstorming	Suggest jobs associated with the solid earth
	Discriminate among jobs suggested and identify jobs to be studied
Gathering information	Gather data from various sources
	Reformulate data and write report

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Make rock collection and identify each Make a sedimentary rock Make a volcano	
Write reports	

UNIT TITLE: GEOLOGY (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers	
People and their job roles:	
Functions	Investigate, identify and describe jobs related to the solid earth
Locations -exterior -climatic	Discuss locations of geological work and characteristics of each
Working conditions	
Training	Understand the various education required for people who work in jobs related to geology

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A VOLCANO

II. ACTIVITY FORMAT:

A. Tools and Materials

flower pot
plaster of paris or clay
evaporating dish or tin can
Ammonium dichromate (from Troy Scientific)

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Invert flower pot; cover it with clay or plaster of paris
2. Extend above the pot to create crater
   a. crater 2"-3" across
   b. 1-1/2" deep
3. Insert small dish or can - surround can with plaster of paris
4. Pour IT of ammonium dichromate into crater
5. Hold a match to the ammonium dichromate until it lights
6. The volcano erupts, shoots sparks into the air and green fluffy material is formed

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ROCK COLLECTION

II. ACTIVITY FORMAT:

A. Tools and Materials

rocks from home
books on rocks
vinegar
newspaper
hammers
magnifying glass

B. Human Aides and Resources

Parents

C. Procedures for this activity (with helpful hints)

1. Collect rocks
2. Divide rocks into groups according to similarities of color, shape, material
3. Decide how they were made
4. Crack rocks
5. Using magnifying glass, examine crystals inside
6. Using vinegar, test for limestone
7. Wet rocks to see if they smell like soil or sand
8. Make display of identified rocks
9. Brainstorm on jobs connected with rocks

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

RESEARCH REPORTS - MOUNTAINS, EARTHQUAKES, VOLCANOES, GLACIERS, GEYSERS AND FAULTS

II. ACTIVITY FORMAT:

A. Tools and Materials

texts
library
newspapers

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Students pick one of the 6 topics
2. In each report each student answers these questions:
    a. How does this change occur?
    b. How does this change affect the people in the area?
    c. How are new jobs created when this change occurs?
    d. What are the jobs created when this change occurs?

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A SEDIMENTARY ROCK (SANDSTONE)

II. ACTIVITY FORMAT:

A. Tools and Materials

sand
cardboard container
plaster of paris

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Put sand in container
2. Add plaster of paris - mix well
3. Add a small amount of water
4. Allow to dry
5. Discuss:
    a. How sandstone is used
    b. How sandstone is taken from earth
    c. Jobs involved with sandstone

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

FOSSILS (MAKING)

II. ACTIVITY FORMAT:

A. Tools and Materials

modeling clay
small milk carton
molding plaster
sandpaper
vaseline
a shell

B. Human Aides and Resources

Parents

C. Procedures for this activity (with helpful hints)

1. Put a 1/2" layer of clay on bottom of milk carton
2. Grease remainder of carton with vaseline
3. Press shell into clay; remove shell without disturbing impression
4. Mix plaster and water into thin paste - pour into carton
5. When hardened, tear carton, remove plaster block
6. Sandpaper the edges until smooth and straight
7. Discuss what person uses this technique - what does his job involve
8. What other jobs use molds and casts to build things

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

GROWING CRYSTALS

II. ACTIVITY FORMAT:

A. Tools and Materials

sugar
tumbler
deep saucer
string

B. Human Aides and Resources

Jeweler

C. Procedures for this activity (with helpful hints)

1. Dissolve as much sugar as possible in a tumbler half filled with hot water
2. Pour solution into deep saucer
3. Put string into saucer, allow some of string to hang over edge
4. Put saucer in quiet corner - let evaporate for two days
5. Pour off solution
6. Examine crystals with magnifying glass
7. Discuss how man uses crystals to his advantage
8. Have a jeweler come into room and talk to class about his job and how he works with crystals

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT PLANSHEET

TITLE: OCEANOGRAPHY

GRADE LEVEL: 5-6

TEACHING/LEARNING RESOURCES:

1. **Reference materials:**

   Films: Fortnight at Nine Fathoms
   The Sea
   Man in the Sea
   The Earth: Its Ocean

2. **Field Trips:**

   Diving Equipment Company
   Belle Isle Aquarium and Dawsin Museum, Belle Isle
   Tropical Fish Store

3. **Human Resources:**

   Parent or school personnel with diving experience

4. **Activities:**

   Design and build a model sea lab - either scale-model or life size

   Role playing:
   Aquanauts
   Scientists
   Engineers
   Biologists
   Describing their own part in a sea lab venture

UNIT TITLE: OCEANOGRAPHY

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit each child will be able to:
Math	
Measurement	Use linear measurement
Geometry	Design using geometric shapes
Scale	Reduce life-size measurements to scale model
Sea Measurement	Define and demonstrate knots, fathoms
Science	
Marine Biology	Investigate a sea animal or fish of his choice-report to group regarding a) habitat (environment) b) protective devices c) life cycle
Engineering design	Discover, contrast and compare various undersea habitats (sea labs, Tektite II, etc.). Within groups design a sea lab to meet the groups' specification.

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Using large boxes, measure and cut according to design group has made of their sea lab For scale models, reduce design measurement to scale, stating scale used, following same scale throughout	
Using library books, films, filmstrips, shells, starfish, etc., put together a Marine Biology Center. Encourage bringing in collections, books, from home	Show movie: The Sea
There are many resource books available on undersea exploration, habitats, sea labs, stress group cooperation	Movie: Man in the Sea Parent who is an industrial designer, draftsman, engineer to give some direction
Draw final design with measurements, specifications	

UNIT TITLE: OCEANOGRAPHY (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Language Arts	
Reports	Prepare written report Deliver report orally using realia, pictures or charts
Letters	Write invitation, thank-you letters to speakers
Interview	Write interview questions and conduct interview
Art	
Murals	Prepare and produce a group mural of a) undersea life b) undersea exploration vehicles

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Design stationery with sea life theme Thank-you letter may be written with one or two sentences from each student rather than individual letters: requires cooperation and reading what has been written beforehand May interview parents with diving hobbies, tropical fish owners, fish store owners, speakers for class newsletter or school paper	Art teacher
Using dark or medium blue background paper, or flocked paper, sketch first with pencil, then finish with chalks, crayons, paints or whatever medium group decides	Art teacher

UNIT TITLE: OCEANOGRAPHY (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers	
People and their job roles:	
Scuba diving and snorkeling (as hobbies) Scuba diving (professional)	Recognize and cite evidence for scuba diving as hobby, snorkeling as hobby
Equipment sales	Discuss equipment and other requirements, interview manager, discuss job requirements and related careers
Teaching of diving	Interview diving teacher, discuss job requirements, roles
Aquarium employees	Examine roles of different types of aquarium workers
Aquarium sales	Discuss careers with owner, manager, salespeople
Tropical fish	Interview a marine biologist, examine roles of aquanauts, marine biologists
Marine biologists	Biologists in books and films

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Have resource person demonstrate equipment needed for hobby and any prerequisites for diving	
Visiting diving sales outlet. Manager should be available for interview, discussion, demonstration	
Have diving teacher come in, or visit store which sells equipment and gives lessons (check YMCA also)	
Visit Aquarium at Belle Isle - discuss roles with any available employees	
Visit local tropical fish or aquarium sales store	
See movie *Fortnight at Nine Fathoms* for insight into lives of aquanauts, scientists, biologists Read comic book *Popeye, Marine Science Careers*	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BUILDING A SEA LAB

II. ACTIVITY FORMAT:

A. Tools and Materials

refrigerator boxes or large cartons
scissors
exacto knives
rulers
pencils
paints

B. Human Aides and Resources

Books on undersea habitats

C. Procedures for this activity (with helpful hints)

Divide into groups. Each decides whether to make large or scale model habitat. Using resource books, each group designs its own Sea Lab on paper, carries design over onto cardboard, cuts and assembles. This can be as simple or complex as group desires. "Full size" sea labs may be large enough for 2 or 3 students. They may include portholes, entry-ways, "pressure gauges," and any other equipment group decides on.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: WATER

GRADE LEVEL: 6

TEACHING/LEARNING RESOURCES:

1. Reference materials:

   Pamphlets from water authority
   Children & Technology, Scobey

2. Field Trips:

   Trip to pumping station in Berkley
   Visit Oakland County Water Authority

3. Human Resources:

   Guide from Oakland County Water Authority

4. Activities:

   Measuring water pressure
   Constructing water wheel
   Tracing source of Mississippi River
   Experimenting with beans to show that they need water
   Reconstitution of dried fruit
   Brainstorming - concentrating on uses of water

UNIT TITLE: WATER

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Science	
Irrigation	Purpose and defend reasons for irrigation
Water supply	Identify the variables connected with the water supply in various parts of the world
Science	
Water cycle	Discuss critically and identify the variables in the water cycle
Water pressure	Discover and justify use of water pressure
Water purification	Propose and defend reasons for the necessity of water purification
	Identify and justify methods of water purification
Math	
Measurement	Gather data from home on the amount of water required in each student's home
	Compute from information gathered, amount of water used by entire class for one day
	Compute water needed for individual operations (i.e., washing dishes, washing clothes, watering lawn, etc.)

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS

UNIT TITLE: WATER (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Language Arts	
Reports	Gather data for reports from various sources Write report
Spelling	Identify and use properly spelling words associated with water
Careers	
People and their job roles:	List occupations relating to water Identify and describe the role of a sewer, piper and layer
Managing	Identify the management practices that are utilized by the water department
Servicing	Discuss critically the services concerned with water purification Identify and differentiate between methods of water testing Propose and defend reasons for the necessity of a plumber
Hiring	Role play a prospective employee being interviewed for a job as a meter reader

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

EXPERIMENTING WITH BEANS SHOWING NECESSITY OF WATER

II. ACTIVITY FORMAT:

A. Tools and Materials

various beans
pans
paper toweling
water

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Put beans in pan with some wet paper toweling
2. Observe beans for a couple days
3. Record findings
4. Beans will sprout in 2-3 days

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

WATER PRESSURE
CONSTRUCT A WATER WHEEL (See Children & Technology by Scobey, p. 370)

II. ACTIVITY FORMAT:

A. Tools and Materials

five gallon can
water
corks

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Punch three holes in the can; one, a quarter of the way down from the top; one, half way down; one, three-quarters of the way down. Put corks in the holes and fill the can with water. Pull the three corks and observe the length of the spout of water from each hole.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: ECOLOGY

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this Ecology section, the following integrated teaching units have been combined and/or presented as a tentative guide for ideas, in application to or relevance to the upper elementary classroom:

1. Plants in Our Society
2. Interdependence of Living Things
3. Pride in Property

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Plants -

Books:
You Visit a Spaghetti Factory and Bakery
Your World - We Visit a Bakery
Science for the Elementary School - Victor, pp. 343-44
World Book Encyclopedia

Films:
Bakery Beat
Color of Life
Conserving Our Soil Today
Understanding Our Earth:Soil
Let's Watch Plants Grow
Plants That Grow From Leaves, Stems and Roots

Interdependence -

Books:
The Birth and Growth of a Tree
How Birds Keep Warm in Winter
The Quail
Something Told the Wild Geese
Sounds of a Distant Drum
Sounds of a Mystery
A Tree Called Moses
Trees Alone Do Not Make a Forest
Wild Flowers of Michigan

Charts:
Audubon Nature Charts - Bird Migration
Audubon Nature charts:
  1. Common North American Evergreens
  2. Common Seed Travelers
  3. Forest Food Chains

4. Leaves of Common Trees - Compound
5. Leaves of Common Trees - Simple
6. Twigs of Common Trees

Birds of North America
Birds of Prey
Growth of a Tree
Products of the Tree Farm
Winter Birds

Films: ABC's of Tools
Birds in Winter
Cry of the Marsh
Discovering the Forest
Maps are Fun
Nature's Half Acre

Film-strips: Forests
Forests: A Stable Community
Helping the Birds
How Birds Serve Man
Learning About Birds
Life in the Forests
Looking at Birds
Migration of Birds
Observing Birds in Nature
Primeval Forests
Telling Trees Apart
Trees
Using Forests Wisely
Walk in the Woods
What is a Bud

Flat Pictures: Common Birds
Forests
Traveling with the Birds

2. Field Trips:

Plants -

Belle Isle Aquarium (Food cycle)
Belle Isle Botanical Garden
Quickstad Park - Royal Oak
Seven Ponds Nature Center - Dryden, Michigan
S.E.O.V.E.C.
Stoney Creek Nature Center and Trails

Interdependence -

Cumingston Park
Pet Store
Poultry Farm
Slaughter House
Trip to ranch for cows; steer; sheep; hogs; etc.

Various housing projects
Veterinarian farm visit
Veterinary Clinic

3. Human Resources:

Plants -

S.E.O.V.E.C. Horticulturist
Naturalists at Seven Ponds Nature Center
Florist
M.C.C. Students
S.E.O.V.E.C. Food Services
Coast Guard Cook

Interdependence -

Botanists
Landscapers
Naturalists
Conservationists
Carpenters
Lumberjacks
Poultry farmers
Florists
Farmers
Ranchers
Herders

4. Activities:

Plants -

Starting plants from seeds
Controlled experiments for testing good growing conditions
Making boxes for plants
Writing reports on plants
Planting gardens
Building model bakery
Planting wheat in boxes
Baking rolls
Baking homemade bread

Interdependence -

Role playing:
  Role of herder, with class as herd
  Role of farmer, etc., at auction to buy or sell animals
  Role of animal "keeper" as the role varies geographically
Draw basic structure of a bird
Building bird feeder
Study plants and animals in relation to environment and ecology

Pride in Property -

- Clean up school:
    - flower beds
    - playground
- Plant new flowers
- Make bricks to be used in flower beds
- Refinish wooden top desks
- Cleaning off formica top desks

UNIT TITLE: PLANTS

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Science	
How plants are used in industry	List five ways in which plants are used in industry
How people use plants	List five ways in which people use plants
Ecology (cleanup)	Justify reasons for cleanup of classroom or work area when activity is completed
Science	
Identification of plants	List the parts and functions of flowering plants
	List three plants used for medicinal purposes
	List 10 plants used as food crops
	List five green plants and five non-green plants
	Distinguish between simple and complex plants
	Identify five types of plants found in immediate area
Planting seeds and plants	Plant and nurture wheat in planter

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Writing reports on plants Planting gardens Making boxes for plants	
Controlled experiments for testing good growing conditicns Starting plants from seeds	

UNIT TITLE: PLANTS (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
Science (Continued)	
Growth of plants	Identify the variables in growing plants Recognize how green plants make their own food Describe the process by which plants produce carbon dioxide Differentiate between traits of plants grown in different areas
Trade plants with other areas	
Language Arts	
Research	Locate information about subject under study in library
Following directions	Interpret and apply written instructions
Oral discussions	Describe orally plant-animal dependence and relationships
Listening skills	
Thank-you letters	Write a thank-you letter
Writing reports	Write for information about wild flowers
Spelling	Write a summary of a field trip

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Planting wheat in boxes	
Writing reports on plants	

UNIT TITLE: PLANTS (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Mathematics	
Measurement	Measure wood for planter from a large piece Measure ingredients for baking rolls Measure designated amounts of soil, water, plant food
Careers	
People and their job roles:	
Hiring	Describe the steps involved in being hired for a job
Training	
Working conditions	

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Baking rolls Baking homemade bread Starting plants from seeds Planting gardens Making boxes for plants	
Building a model bakery	

I. NAME OF ACTIVITY

PLANTING AND GROWING SEEDS

II. ACTIVITY FORMAT:

A. Tools and Materials

seeds (lima, radish, bean)
blotters
soil
charts to show growth

vaseline
aluminum foil
water

B. Human Aides and Resources

Teacher
Parents

C. Procedures for this activity (with helpful hints)

1. Give seeds to students
2. Let them experiment with many different growing conditions
3. Have them keep a chart of the growth and changes in the seeds (plants)
4. Discuss with class the conditions they found best for growth - then discuss greenhouses

I. NAME OF ACTIVITY

BAKING ROLLS
(Recipe follows for Quick Yeast Bread)

II. ACTIVITY FORMAT:

A. Tools and Materials

mixing bowls
measuring cup
measuring spoons
sauce pan
knife
wire mixer
baking pans

B. Human Aides and Resources

two mothers

C. Procedures for this activity (with helpful hints)

The class was divided into two groups, and a mother worked with each group, showing them separately how the dough was made and baked

I. NAME OF ACTIVITY

HOMEMADE BREAD

II. ACTIVITY FORMAT:

A. Tools and Materials

ingredients
bowls
dish cloths
mixing spoons
measuring spoons, cups

B. Human Aides and Resources

3 mothers

C. Procedures for this activity (with helpful hints)

1. Recipe (attached) makes 2 loaves, divide into groups of 2. Each group brings a set of measuring cups, spoons, a wooden spoon, one large bowl and one small bowl. Each child brings one bread pan and a clean dish cloth to cover bread while rising.
2. If you begin making the bread by 9:00 a.m., the second rising will take place during lunch, and you can bake the bread by 2:00 p.m.

QUICK YEAST BREAD

2 pkg. dried yeast
1 cup lukewarm water
1 t. sugar
1 cup milk - scalded
2-1/2 t. salt
1/3 cup sugar
2 eggs, well beaten
1/3 cup melted shortening (Crisco), half butter
6-1/2-7 cups sifted all purpose flour

METHOD

Sift flour into large bowl and set aside.

Soften yeast in lukewarm water with 1 teaspoon sugar in large mixing bowl. Have another bowl, greased with Crisco or Pam ready.

Bring milk to boil in sauce pan (scald). Take off heat, add salt and 1/3 cup sugar. Cool to lukewarm by setting mixture in pan in another pan with cool water in it. When mixture is cooled, add to yeast in bowl along with the 2 beaten eggs.

Melt shortening, butter mixture in small pan over heat. Cool in larger pan with cool water in it.

Add 4 cups flour into yeast-egg mixture and beat until smooth. Add melted cooled shortening, butter mixture and again heat until smooth. Stir in and knead enough flour to make a smooth, elastic dough but not too stiff.

Place in greased bowl, turning dough over once. Cover bowl. Let rise in cozy warm place (85 degrees) about 1 hour, or until double in size. Then turn out onto lightly floured board and shape into rolls or three loaves. Place in greased pans - cover. Let rise again in warm place until double, about 30 minutes.

Bake in moderate oven (400 degrees) 15-20 minutes for rolls.
Bake loaves 20 minutes at 400 degrees, then reduce heat to 350 degrees and bake 20 minutes longer.
Let loaves cool before taking them out of pans.

MAKES 2 DOZEN ROLLS, OR 3 SMALL LOAVES.

HOMEMADE BREAD

2 cups milk
3 T. sugar
1 T. salt
1/2 cup margarine or butter
1/2 cup warm water (105-115 F.)
2 pkg. active dry yeast
6-1/2 to 7 cups sifted all-purpose flour
2 T. melted butter

1. In small sauce pan, heat milk just until bubbles form around edge of pan. Remove from heat, pour in small bowl. Add sugar, salt and 1/2 cup butter. Stir until butter is melted. Let cool to lukewarm.

2. Pour water into large bowl. Sprinkle yeast over water in large bowl, stirring until dissolved. Stir in milk mixture.

3. Add half your flour, beat with your mixing spoon until smooth - about 2 minutes.

4. Gradually add remaining flour, mixing it in with hand until dough is stiff enough to leave side of bowl.

5. Turn out dough on your LIGHTLY FLOURED table, cover with bowl; let rest 10 minutes.

6. Knead dough for ten minutes.

7. Place dough in SLIGHTLY GREASED bowl, turn dough around so greased side is up. Cover with your towel. Let rise in warm place until double in bulk, or about one hour.

8. Punch down dough with fist. Turn dough onto SLIGHTLY FLOURED table. Divide in half, shape each half into a ball. Cover with towel, let rise ten minutes.

9. Stretch dough until it is about 27 inches long (3 times as long as pan in which it will be baked.)

10. Fold dough in thirds, pressing or rolling any air pockets until dough is a 7 inch square.

11. Fold dough into thirds pressing to remove any air pockets. Seal edge and ends of loaf by pinching together. Roll load to smooth it. Place in SLIGHTLY GREASED pan.

12. Brush loaf with melted butter. Cover with towel, let rise until double in bulk - about one hour.

13. Bake 40 to 50 minutes at 400 F. Cool on racks.

I. NAME OF ACTIVITY

CONSTRUCTION OF PLANTER BOXES

II. ACTIVITY FORMAT:

A. Tools and Materials

saws
nails
hammers
lumber

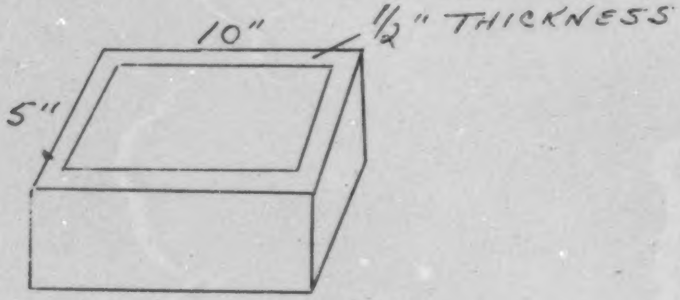
B. Human Aides and Resources

Students from M.C.C.
Irene Mann

C. Procedures for this activity (with helpful hints)

The planter boxes should be lined with plastic sheeting to prevent leakage and rotting of wood. The plastic was stapled into the inside of the boxes

(Get order from Irene Mann)



HANDS ON ACTIVITY (STUDENT PERFORMED) PLANTS

I. NAME OF ACTIVITY

MAKING BOXES TO SHOW VARIOUS SOIL PRACTICES

II. ACTIVITY FORMAT:

A. Tools and Materials

saws
tools
putty knife
scissors
soil
wood
screening
glass jars with metal tops

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Cut wood into pieces to construct a box, open at one end, which is 30 in. long, 9 in. wide, and 6 in. deep
2. Nail screening to open end
3. Seal sides with putty to make watertight
4. Fill boxes with soil and experiment with these concepts:
   a) loose soil erodes more than packed soil
   b) the steeper the slope, the greater the erosion
   c) contour plowing reduces erosion
   d) terracing reduces erosion
5. Make watering cans from glass jars with metal tops - punch holes in top

HANDS ON ACTIVITY (STUDENT PERFORMED) INTERDEPENDENCE

I. NAME OF ACTIVITY

MAKING BIRD FEEDERS

II. ACTIVITY FORMAT:

A. Tools and Materials

saws
sandpaper
nails
hammers
wood
vises
stain
files
varnish

B. Human Aides and Resources

Parents - two parent volunteers (preferably men)

C. Procedures for this activity (with helpful hints)

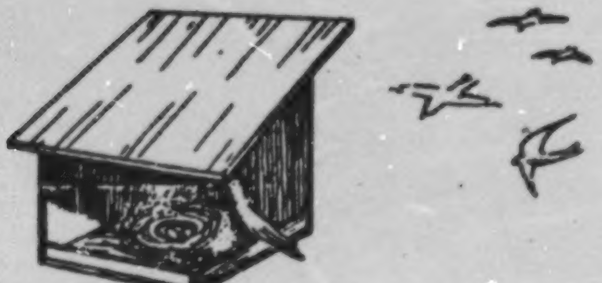
Class discussion and resulting decision on whether feeders are to be constructed by individual, pair of students, small group or mass production method

Class decided feeders to be produced via mass production
Teacher acts as group coordinator
Adult works with measuring group
Adult works with cutting group
Adult works with constructing group
Adult works with rough finishing group (filing and sanding)
All groups participate in final staining and varnishing

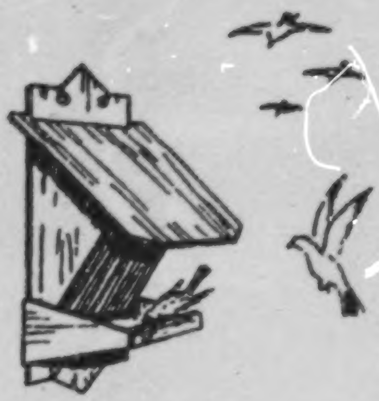
INTERDEPENDENCE

NESTING SHELTER-FEEDING BOX

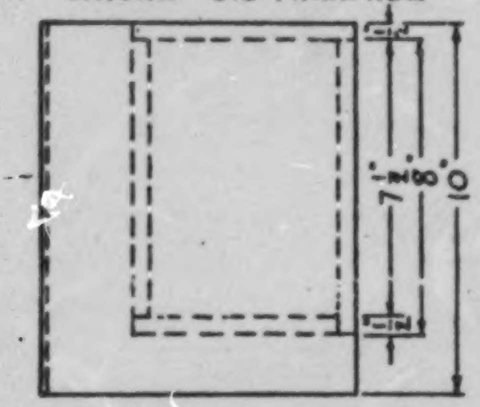
PROJECT NO. C71



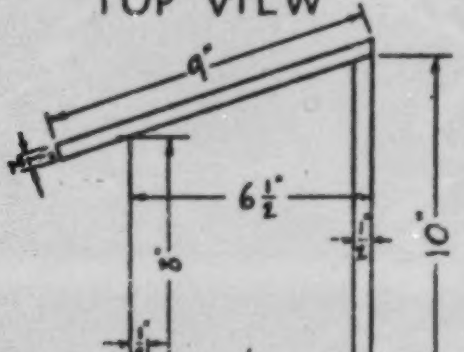
FOR
ROBIN PHOEBIE SONG SPARROW BARN SWALLOW CATBIRD OR THRASHER



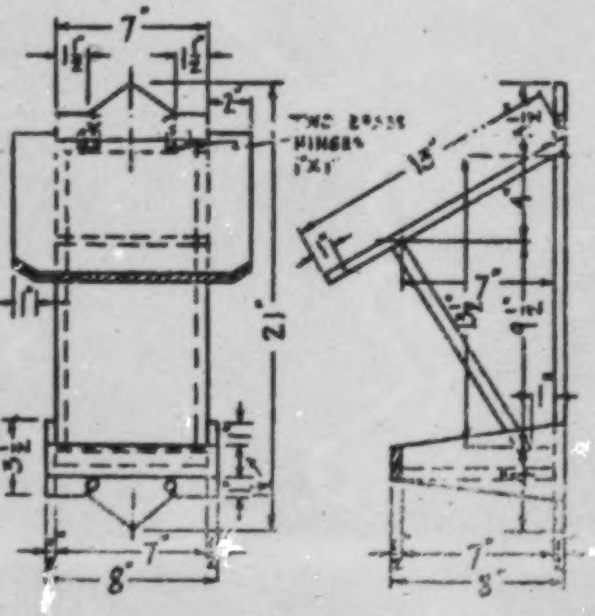
FEEDING BOX


½ IN
7"
8½"
10"
½ IN

TOP VIEW



FRONT VIEW


7"
1½
1½
2"
TWO BRASS HINGES 1"X1"
21"
1"
3½"
7"
8"
15"
7"
15"
½ IN
1
7"
8"

FRONT VIEW SIDE VIEW

UNIT TITLE: INTERDEPENDENCE OF LIVING THINGS

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Sciences	
Domestication of animals	List one product (other than meat) of each domesticated animal under study
	Match a farm animal with a U. S. geographic area where the animal is most prominent
Birds	Identify local birds, their migration patterns, food and aesthetic value
Interdependence of plants and animals	Discuss the interdependence of society of living things for food, construction, transportation, medicine and protection
	List ways trees are used by man
	Recognize and cite evidence for care of living things unable to protect themselves
Science	
Classification	Identify locally grown trees and describe their assistance in soil composition
Birds	State the food and shelter requirements of various types of birds (local, birds of prey, carrion-eaters).
Interdependence of plants and animals	Describe plant-animal dependencies and relationships (food, protection, transportation)

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Building a bird feeder Study plants and animals in relation to environment and ecology	
Draw basic structure of a bird Building a bird feeder Study plants and animals in relation to environment and ecology	

UNIT TITLE: INTERDEPENDENCE OF LIVING THINGS (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Language Arts	
Writing	Write a thank-you letter to guest speakers Write a report on the interdependence of living things
Discussion and Listening Skills	Discuss the interdependence of the society of living things for food, construction, transportation, protection and medicine
Careers	
People and their job roles:	
Producing and retailing	List three occupations whose products rely on our outdoor environment List three service occupations which rely on our outdoor environment Discuss processes involved in changing raw materials into finished products Build a model bakery, showing different departments needed for production
Personnel	State the qualifications for the following occupations: botanists, landscapers, naturalists, conservationists, carpenters, lumberjacks, poultry farmers, florists

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Role play a herder, with class as herd Role play a farmer Role play a rancher at an auction to buy or sell animals Role of animal "keeper" with role varying geographically	

UNIT TITLE: INTERDEPENDENCE OF LIVING THINGS (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
Careers (Continued)	Describe the steps involved in being hired for a job State the education needed to be a veterinarian Differentiate between the roles of farmers, ranchers, herders in relationship to animals State the roles of processors in marketing

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS

UNIT TITLE: PRIDE IN PROPERTY

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Sciences	
Property pride	Recognize and cite evidence for neatness as being a desirable quality of mutually-held property
Cooperation	Recognize and cite evidence for teamwork as being a requisite in keeping mutually-held property neat
Science	
Changing material appearance	Refinish a desk following given directions
Language Arts	
Listening skills	
Following directions	Manipulate materials for refinishing desks following given directions

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Clean up school Flower beds Playground Plant new flowers Make bricks for use in flower beds	
Refinish wooden desk tops Cleaning formica desk tops	

UNIT TITLE: PRIDE IN PROPERTY (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Math Measurement	Measure sandpaper and varnish needed to refinish a desk
Careers People and their job roles: Personnel	State qualifications needed for carpentry

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS

I. NAME OF ACTIVITY

MAKING BRICKS

II. ACTIVITY FORMAT:

A. Tools and Materials

cement
containers
motor oil/brush
brick molds
boards
trowels
rulers
measuring cup
wooden spoon or stick

B. Human Aides and Resources

Teachers, parents, college students, LRT

C. Procedures for this activity (with helpful hints)

1. Mix concrete in containers by measuring 4 cups cement to 2 cups water. (should be the consistency of dough)
2. Brush inside of mold with oil
3. Pour mixture in mold - let set for about 1 hour or until mixture will not push in
4. Take brick out of mold and let set until hard

I. NAME OF ACTIVITY

REFINISHING WOODEN TOP DESKS

II. ACTIVITY FORMAT:

A. Tools and Materials

sandpaper - coarse
sandpaper - fine
varnish (we used special sealer with custodian)

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Plan activity
2. Sand desks
   a) groups of two or three
   b) as other completed work - helped others
3. Switch to fine sandpaper
4. Custodian (in this case) - use electric sander to get difficult spots
5. Varnish with a sealer

HANDS ON ACTIVITY (STUDENT PERFORMED) PRIDE IN PROPERTY

I. NAME OF ACTIVITY

PLANTING BULBS

II. ACTIVITY FORMAT:

A. Tools and Materials

- hoe
- water sprinkling can
- spade
- flower bulbs
- fertilizer
- screening for protection of garden
- tongue depressers to label experiments

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Plant bulbs in 4 areas around school
    - a) Area 1 - Geraniums, fertilizer, water, no light or locus seeds
    - outside b) Area 2 - Geraniums, fertilizer, light, no water
    - c) Area 3 - Geraniums, light, water, and fertilizer
    - d) Area 4 - Different kind of flower, light, water, fertilizer
    - inside e) Area 5 - Geraniums, light, water, fertilizer
    - f) Area 6 - Geraniums, water, fertilizer, no light
2. Weekly graph growth of flowers
3. Group reports to class on results

UNIT TITLE: EXPLORATION OF CREATIVE WRITING FORMS

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit each child will be able to:
Language Arts	
Story writing Creative writing	Write a story for play adaptation
Story classification	Classify the story into the category of myth, tale, or legend
Dramatization	Differentiate between narration and dramatization
Narration	
Math	
Measurement and Proportion	Construct a stage Devise a curtain system Use of tools in measurement

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: EXPLORATION OF CREATIVE WRITING FORMS

GRADE LEVEL: 5-6

GENERAL OVERVIEW: The purpose of this unit is to introduce the child to the different forms of writing (mythology, legends, and tales). The child will then compose his own myth, legend or tales.

TEACHING/LEARNING RESOURCES:

1. **Field Trips:**

   See a play and go backstage - lighting, make-up, costumes, sets, etc.

2. **Human Resources:**

   Puppeteer
   Make-up artists

3. **Activities:**

   Narration and dramatization
   Produce and present a play for a school assembly

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Writing of original plays	
Make a stage for puppets	

UNIT TITLE: EXPLORATION OF CREATIVE WRITING FORMS (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers	
People and their job roles: Producing Managing Servicing	Identify different types of work related to theater: Stage production - Carpentry Play production - Puppetry Costuming Tailoring Make-up Writing

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Attend play and go backstage to interview behind-the-scenes workers	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKE STAGE FOR PUPPETS

II. ACTIVITY FORMAT:

A. Tools and Materials

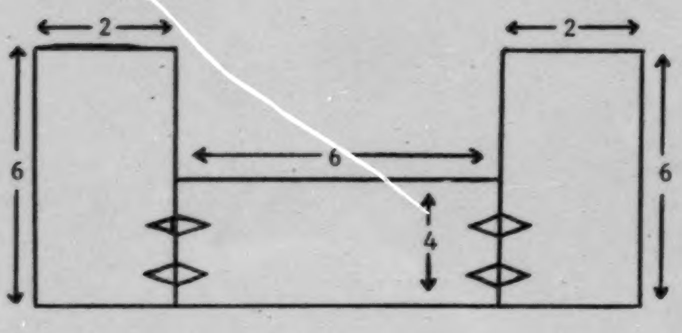
1/2" plywood (2 sheets 4 by 6)
1 saber saw
4 door hinges
Washers
Nuts and bolts
Curtain rods
Stain
Pliers
2 screen hooks
Measure
Screw driver
Electric drill
Sand paper
Material for curtains

B. Human Aides and Resources:

One teacher aide

C. Procedure for this activity (with helpful hints)

Cut one sheet of 4' by 6' into two 2' x 6' sheets (sand and stain)
Put hinges approximately 6" from bottom and top of middle 4' by 6' sheet
Drill holes, attach hinges and curtain rods



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY:

MAKE PUPPETS

II. ACTIVITY FORMAT:

A. Tools and Materials

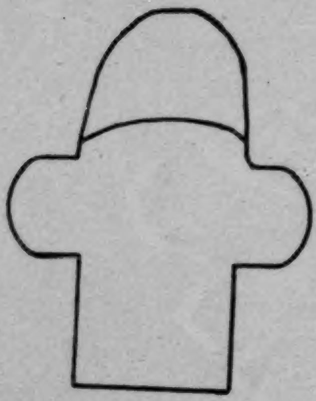
Pattern - shown below
Sewing maching
Percale - 6 yards
Glue
Scissors
Felt and fabric scraps
Needle and thread

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

Make pattern to fit largest hand in class



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY:

WRITING OF ORIGINAL PLAYS

II. ACTIVITY FORMAT:

A. Tools and Materials

Pencil
Paper

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

Children listened to examples of effective dialogue.

Children were encouraged to act out plays, revise during acting, and use constant feed-back to polish final scripts.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: Graphic Communications - Books and Newspapers

GRADE LEVEL: 5-6

GENERAL OVERVIEW: This unit encompasses the making of paper, books and newspapers.

TEACHING/LEARNING RESOURCES:

1. Reference materials: Films, filmstrips, loops, books, etc.

Books: The Papermakers: Teaching Children About Technology
How Paper is Made
The Magic of Paper
More Experiments in Science
The Printers
Printing as a Hobby

Communication: From Cave Writing to TV

Kits: Activity Cards - Detroit News
Daily Detroit News delivered two weeks
Detroit News Classroom Kit

Films: From Trees to Books

Filmstrips: The Book
Egypt I
Handwritten Books
History of Printed Books
How Books Are Made
Paper Industry - The Paper Mill
Paper Industry - Trees in the Forest
Story of Paper

2. Field Trips:

Detroit News
Royal Oak Board Printing Office
Royal Oak Public Library
S.E.O.V.E.C. Print Shop

3. Human Resources:

Detroit News - Director of Education
  - Public Relations
  - Guide

Public Library Librarian

4. Activities:

Books: Producing hardbound books individually
Mass-producing hardbound books

1. Assembly line production
2. Composing stories
3. Illustrating stories
4. Acting out occupational concepts

Newspaper: Making paper
Block printing
Activities from Detroit News kit
Role playing

1. Early Egyptian paper maker
2. Early scribe
3. Early historic picture writer in caves
4. Cartoonists

Current events
Production of school newspaper

1. Future writer
2. Write news story for TV
3. Print stories

Job application

UNIT TITLE: GRAPHIC COMMUNICATIONS - BOOKS AND NEWSPAPERS

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Sciences	
History	Recall notable achievements in the history of paper making.
Economics	Use money and parpare change Compute cost and profits of selling published newspapers Understand the concept of "salaries"
Communications	Identify four services provided the public by newspapers
Science	
Change of state	Relate a graphic description of the process of making newsprint from wood and water
Math	
Measurement	Measure with ruler the dimensions of booklets on oak tag Measure a 6 inch by 9 inch piece of cardboard with a ruler Measure an 11 inch by 17 inch piece of paper into two 5½ inch by 8½ inch sections
Quantity	Count the amount of paper needed for making books Do math activities in Detroit News Kit

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Make paper Role playing - Early Egyptian paper making	
Production of classroom or school newspaper	
Making paper Role playing - Early Egyptian paper making	
Producing hardbound books individually	
Mass-producing hardbound books Producing hardbound books individually Do activities in Detroit News Kit	

UNIT TITLE: GRAPHIC COMMUNICATIONS - BOOKS AND NEWSPAPERS

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Art	
Illustrating	Illustrate, with at least 4 pictures (3 inch by 4 inch minimum size), a Christmas story written in a book with 8 pages (4 folded sheets
Careers	
People and their job roles:	
Research	Devise a plan for producing books in class
Production	Prepare patterns for shape and size of booklet covers manufacture, with materials made equally and sufficiently available by the teacher to all pupils, a hardbound book, liner page and 8 book pages Sew,with needle and thread, 5 holes into the folded median line of 4 sheets of paper into the book cover so that the pages are bound into the cover Relate at least 2 advantages of working on an assembly line Relate at least one disadvantage of working on an assembly line Given a newspaper, construct a booklet discriminating between various types of newswriting (features, sports) Experience sub-assembly and final assembly techniques Type, edit, and print newspaper stories Identify jobs involved in producing newspapers
Retailing	Advertise product orally Advertise product through demonstration
Personnel	State qualifications and personal characteristics in a job application form Identify job qualifications Realize job responsibilities Choose a job he is qualified for Use good reporting and interviewing techniques in obtaining news stories

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Produce hardbound books individually Mas-produce hardbound books	
Produce hardbound books individually Mass-produce hardbound books	
Produce classroom or school newspaper	
Produce classroom or school newspaper	
Produce hardbound books individually Mass-produce hardbound books Produce classroom or school newspaper Apply for jobs	

UNIT TITLE: GRAPHIC COMMUNICATIONS - BOOKS AND NEWSPAPERS

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Language Arts	
Reading	Do activities according to written directions Discuss current news events after reading them
Writing	Compose and write an original story; or given Robert Martin's Haunted House orally, change the ending of the story, with either composition being limited in content to the physical confines of the space in the pupil's manufactured book Compose and write an original Christmas story of no less than 50 and no more than 300 words Apply creativity or originality in Christmas stories Write a thank-you note to a guest speaker Write a news story Devise a headline for a news story
Listening	Do activities according to spoken directions
Speaking	Use continuity in storytelling Discuss the format of a news story
Spelling	Spell correctly and define 90% of newspaper terms used in unit study Identify ten meanings of a list of twenty newspaper terms
Grammar	Apply the 5 basic w's (who, what, where, when, why) in newspaper paragraph Identify and correct 4 mistakes in a given sample news story containing 5 mistakes

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Discuss current events Produce classroom or school newspaper	
Produce hardbound books individually Mass-produce hardbound books	
Produce classroom or school newspaper	
Produce hardbound books individually	
Mass-produce hardbound books	
Produce classroom or school newspaper	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ASSEMBLY LINE PRODUCTION OF HARDBOUND BOOKS

II. ACTIVITY FORMAT:

A. Tools and Materials

Decorative cloth	8½ x 11 paper
Shirt cardboard	Paste
8½ x 11 unlined paper	Needle and thread

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Procedure:

1. Cut 14 x 10 inch piece of decorative cloth from bolt.
2. Cut 12 x 9 inch of shirt or thin cardboard (approximately 1/16 inch thick).
3. Fold cardboard into 6 x 9 inch sections for cover.
4. Cut or use 8½ x 11 inch unlined sheets of paper.
5. Fold 8½ x 11 inch paper sheets in half, producing 5½ x 8½ inch pages.
6. Paste decorative cover onto cardboard, cutting exposed cloth corners diagonally to avoid overlapping on folded edges.
7. Insert folded white paper into cover and sew this signature of pages onto cover in 5 places: once inch from top, half inch down, one inch down, one inch down, half inch down, leaving 4 inches of thread at bottom to bring in to middle and tie with thread sewn into cover.

Assembly Line Production of Hardbound Books:

1. Have pupisl brainstorm about necessary stations and personnel to manufacture books on an assembly line with procedures listed in steps 1-7 of Activity above.

2. Have pupils organize themselves into groups named in brainstorming (step 1 above) and make signs naming stations and giving directions to perform job in that station.

3. Distribute materials needed for and produce books according to steps 1-7 of Activity above.

4. Proceed to compose and illustrate Christmas stories in books, incorporating copyright and title pages.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

INDIVIDUAL CONSTRUCTION OF HARDBOUND BOOKS

II. ACTIVITY FORMAT:

A. Tools and Materials

Decorative cloth
Shirt cardboard
8½ x 11 unlined paper
8½ x 11 paper
Paste
Needle and thread

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Procedure:

1. Cut 14 x 10 inch piece of decorative cloth from volt.
2. Cut 12 x 9 inch of shirt or thin cardboard (approximately 1/16 inch thick).
3. Fold cardboard into 6 x 9 inch sections for cover.
4. Cut or use 8½ x 11 inch unlined sheets of psper.
5. Fold 8½ x 11 inch paper sheets in half, producing 5½ x 8½ inch pages.
6. Paste decorative cover onto cardboard, cutting exposed cloth corners diagonally to avoid overlapping on folded edges.
7. Insert folded white paper into cover and sew this signature of pages onto cover in 5 places: one inch from top, half inch down, one inch down, one inch down, half inch down, leaving 4 inches of thread at bottom to bring in to middle and tie with thread sewn into cover.
8. Proceed to compose and illustrate Halloween story in book, incorporating copy right page and title page.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING BOOKS

II. ACTIVITY FORMAT:

A. Tools and Materials

Scissors
Paper cutter
Stapler
Binding tape
Oak tag
Colored paper
Wall paper
White paper

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Write story.
2. Transfer story to sheets of folded white paper.
3. Illustrate book.
4. Staple pages in the middle.
5. Cut tagboard about 1 inch larger all around than size of open pages.
6. Cover tagboard with wallpaper or colored paper.
7. Affix with binding tape.
8. Illustrate cover.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BOOK MAKING

II. ACTIVITY FORMAT:

A. Tools and Materials

Construction paper	Tape
Writing paper	Glue
Rulers	Scissors
Needles	Thread

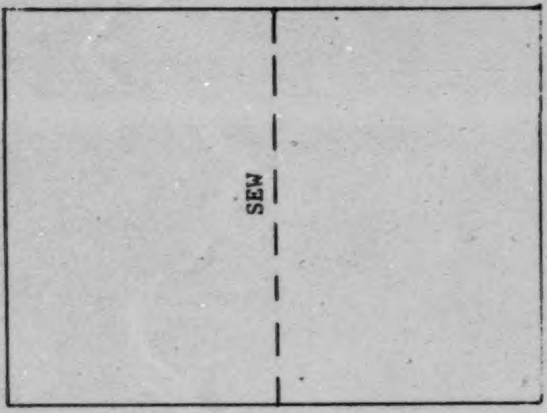
B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

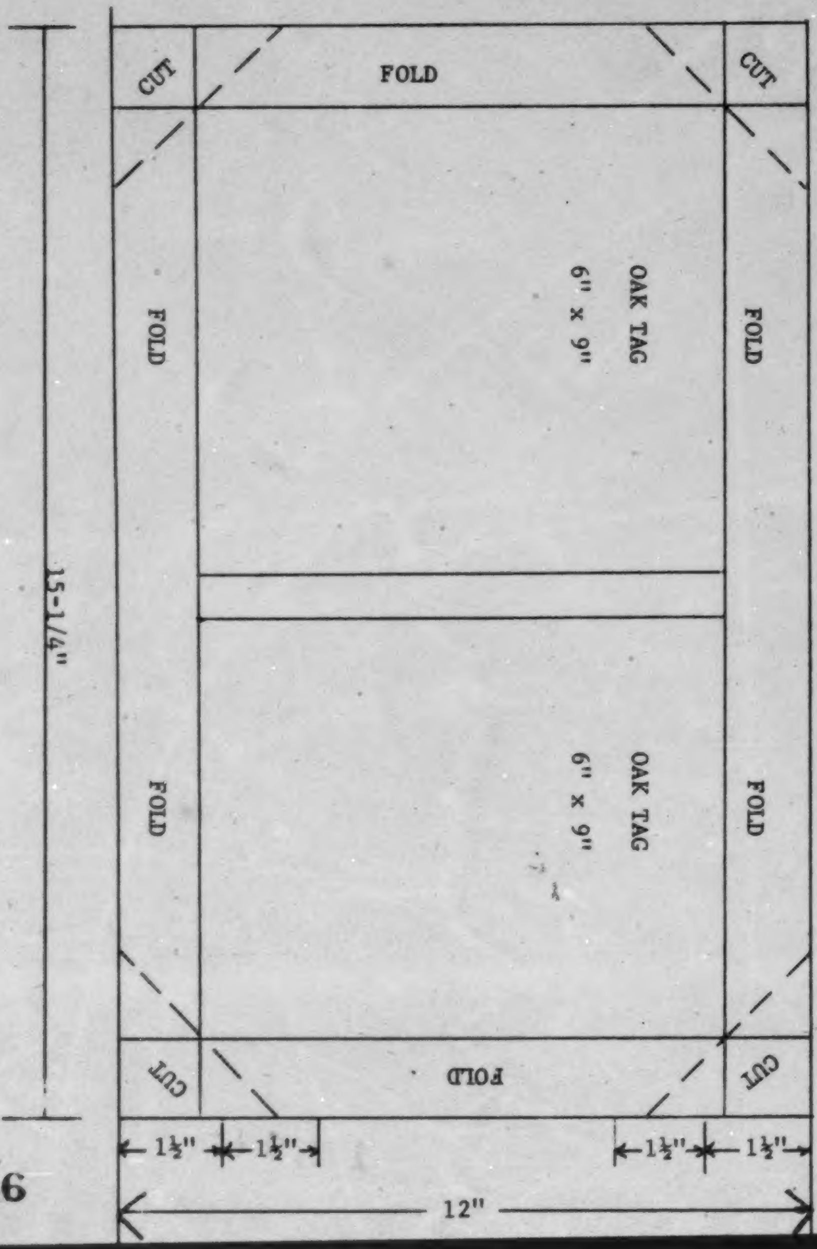
1. Lay out construction paper to desired dimensions (see drawing).
2. Cut off excess paper and fold.
3. Count out the desired number of writing papers and background paper.
4. Sew writing paper together.
5. Place oak tag into folded portions of construction paper.
6. Tape oak tag.
7. Glue writing paper unto oak tag.

Student jobs:

1. Layout
2. Cutters and folders
3. Oak tag cutters
4. Paper counters
5. Sewers
6. Tape oak in booklets
7. Final assembly



WRITING PAPER
8-1/2x11"


CUT
FOLD
CUT
FOLD
OAK TAG
6" x 9"
FOLD
FOLD
OAK TAG
6" x 9"
FOLD
15-1/4"
CUT
FOLD
CUT
1½"
1½"
1½"
1½"
12"

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. **NAME OF ACTIVITY**

MAKING BOOKS

II. **ACTIVITY FORMAT**:

A. Tools and Materials

Rulers
Scissors
Brushes
Pencils
Paper punch
2 paper cutters
Reinforcements
Cardboard
Heavy duty string
Paint
Paper (8½ x 11 - unlined, unholed)

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. a. Measure cardboard (4¼ x 11)
   b. Measure paper (4¼ x 11)
2. a. Cut cardboard with cutter
   b. Cut paper with cutter
3. a. Measure 2 holes on cardboard edge
   b. Cut paper with cutter
4. a. Punch holes in cardboard
   b. Punch holes in paper
5. Bend cardboard near holes
6. Reinforce holes, cardboard
7. Tape borders of cardboard
8. a. Paint carboard
   b. Count paper - 10 sheets
9. Assemble paper between cardboard covers
10. Install and tie string

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING PAPER FROM RABBIT PELTS

II. ACTIVITY FORMAT:

A. Tools and Materials

Putty knife
Rabbit pelts
Lime
Rubber gloves
Frame for stretching pelt
Pumice
French chalk (siluate of magnesium)

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

See page 395-396 in Teaching Children About Technology

By Scobey

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING PAPER FROM PAPYRUS

II. ACTIVITY FORMAT:

A. Tools and Materials

- Large kettle
- Scissors
- 2 clean pieces of cloth
- Mallet
- Stone for polishing
- Papyrus - like stalks

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

See page 395 - Teaching Children About Technology

by Scobey

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING PAPER FROM PULP

II. ACTIVITY FORMAT:

A. Tools and Materials

Egg beater
Window screen
Iron
Cooky pan
Hot plate
Wooden spoons
2 full sheets of newspaper
Kraft paper
Soap powder
Laundry bleach
Paper towels
Laundry starch

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Tear 2 full sheets of newspaper into tiny pieces like confetti.
2. Place in a quart of H_2O.
3. Beat this mixture with egg beater until the pieces are well broken up (can add Kraft paper).
4. Beat till thin paste.
5. Add a couple spoonfuls of soap powder.
6. Boil till soft - skim off ink.
7. Let mixture cool; add 3 tbs. of laundry bleach - let stand ½ hour.
8. Pour mixture into a gallon of H_2O.
9. Stir mixture well.
10. Pour diluted mixture over a window screen; lay over sink - allow to drain.
11. Place paper toweling over it to squeeze out excess.
12. Place a dry paper towel on top of the mass of paper fibers - lift all layers from screen.
13. Place layers on table; put another piece of toweling on top of the newspaper - press with a warm iron.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING PAPER

II. ACTIVITY FORMAT:

A. Tools and Materials

Toilet paper
Starch
Large buckets
Felt
Paper making frame
Egg beaters

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Tear toilet paper into very small pieces.
2. Add water and starch - beat with eggbeater until pulp.
3. Dip frame in mixture - get a thin layer of pulp on screen.
4. Place felt over screen.
5. Squeeze out excess water.
6. Let dry overnight.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

NOTE PAPER AND ENVELOPES, CARDS

II. ACTIVITY FORMAT:

A. Tools and Materials

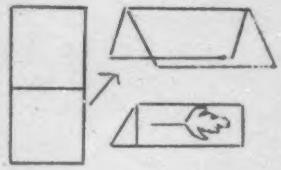
Scissors
Oak tag
Ditto paper
Leaves
Crayons

B. Procedures for this activity (with helpful hints)

List (chronologically) a step by step procedure for each activity being made in the unit.

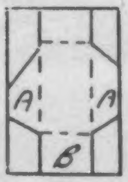
For Note Paper:

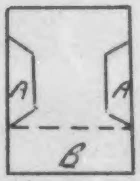
1. Cut or rip paper into half.
2. Fold half into two parts.
3. Put leaf under top paper.
4. Rub crayon or crayons over leaf.

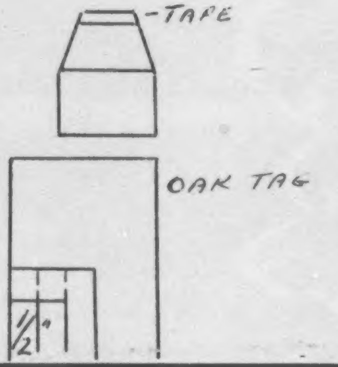


For Envelopes:

1. Take paper - put leaves under and rub with crayons.
2. Cut as follows.
3. Fold "A" in both sides.
4. Put rubber cement on "A".
5. Fold "B" up.
6. Two sided tape - leave cover on until used.
7. Box - place envelope on Oak tag, allowing 1/2" space around. Cut on folded lines - glue with rubber cement.







SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT PLANSHEET

TITLE: HOMEMAKING

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this homemaking section, the following integrated teaching units have been combined and/or presented as a tentative guide for ideas in, application to, or relevance to the upper elementary classroom:

Food preparation
Sewing

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Books:
- ABC Caloric Counter - Basic Health Publication
- About Foods and Where It Comes From
- American Cooks Cookbook
- Better Homes and Gardens Cook Book
- Bread the Staff of Life
- Elementary School Math
- Food the Substance of Life
- This is Automation

Films:
- Bakery Beat
- Dairy Farmer, the Changing Way of Life
- Doing Great Things - Kraft
- Foods from Grain
- Story of Wholesale Market
- What is Automation

Filmstrip:
- Garment Factory
- How America is Clothed
- Milk from the Cow to You
- Retail Store
- Story of Bread, Grain from Farm to Table
- Story of Milk
- Services We Buy
- Things We Buy
- Thinks We Make

2. **Field Trips:**

Koepplinger Bakery, Inc.
To a pancake house
To a pizzeria
Wilson Dairy

3. **Human Resources:**

Representative from the following occupations:

- Bakery
- Small restaurant
- Pizzeria

4. **Activities**

Role playing: Chefs preparing recipes - Kneaders - Bakers - Decorators - Cookie-cutters - Runners - Packagers - Consumers

UNIT TITLE: HOMEMAKING

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Sciences	
Economic choice	Make a Christmas project to donate to poor, helpless or unfortunate people
Science	
Heat	Observe effect of heat on ingredients of pancake batter
Change of state	Recognize and cite evidence for pancake batter changing form to solid pancake over heat
Health	Investigate nutrition of foods to be prepared during unit study

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Baking cookies Making popcorn balls Sewing owl cases for glasses	
Baking cookies Baking bread Making pancakes Making butter Baking rolls Making pizza	

UNIT TITLE: HOMEMAKING (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Math	
Measurement	Measure ingredients used in recipes of foods to be prepared during unit study
Fractions	Recognize quantities of food recipes in fraction form
Number System	Count items produced during unit study
Money	Price each item produced during unit study
Time	Identify time needed for preparing foods to be prepared during unit study
Language Arts	
Reading	Identify proper procedure for activity by reading recipes and/or directions

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Baking cookies Baking bread Making pancakes Making butter Baking rolls Making pizza	
Baking cookies Baking bread Making pancakes Making butter Baking rolls Making pizza Making owl cases for glasses	

UNIT TITLE: HOMEMAKING (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Art	
Decorating	Use his own pattern to decorate his finished product
Careers	
People and their job roles:	
Producing	Justify group work and cooperation in producing goods
Personnel	Recognize the many jobs available from "field to table."

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Decorating cookies	
Baking cookies Baking bread Making pancakes Making butter Baking rolls Making pizza Making owl cases for glasses	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SEWING - OWL CASE FOR GLASSES

II. ACTIVITY FORMAT:

A. Tools and Materials

Scissors
Pen
Sewing maching
Pattern
Thread
Felt or heavy material
Glue

B. Procedures for this activity (with helpful hints)

1. Cut owl from pattern
2. Sew 2 owl pieces together
3. Cut out features of owl for decoration
4. Glue features onto owl

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

A PIZZA LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

knives, bowls, (paper) plates, (plastic) forks, mixers, blenders, measuring cups, grease, pizza cutter, pizza pans, oven

Materials necessary for each item to be made:

Salad	(cucumbers	Pizza	(sauce	sausage
	(tomatoes		(cheese	green pepper
	(green pepper		(water	onions
	(lettuce		(yeast	spices
	(oil		(flour	grease
	(spices			

B. Procedures for this activity (with helpful hints)

1. Cut and trim vegetables for salad
2. Prepare salad dressing
3. Prepare dough for pizza -(see bakery Pizza activity)
4. Trim pizza
5. Bake pizza and toss salad
6. Enjoy, enjoy!

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BAKING PIZZA (about 8 people)

II. ACTIVITY FORMAT:

A. Tools and Materials

1 envelope dry yeast
2 Tablespoon warm water
1 cup boiling water
1 Tablespoon shortening
1 teaspoon salt
1/2 teaspoon sugar
3 cups presifted flour
8 ounces shredded pizza cheese
1 1/2 cups drained canned tomatoes
1/2 cup chopped onions
1/2 teaspoon basil
1/2 teaspoon oregano
pepper
1/2 cup spaghetti sauce
1/2 cup sliced pepperoni

B. Procedures for this activity (with helpful hints)

Preheat oven to 425° F. Grease pizza pan. Soften yeast in warm water in small bowl. Let stand 5 minutes. Stir until dissolved. Pour boiling water over shortening in bowl. Add salt and sugar. Stir until smooth. Cool to lukewarm, stir in yeast. Gradually add flour, beating well to soft dough. Knead on lightly floured board until smooth. Stretch and pull to fit pan. Let rise in warm place for 15 minutes. Sprinkle on cheese. Top with tomatoes. Sprinkle with onions, basil, oregano and pepper. Spread on spaghetti sauce and pepperoni. Bake in preheated oven for 25 minutes or until crust is golden brown. Cut into wedges.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BUTTER MAKING

II. ACTIVITY FORMAT:

A. Tools and Materials

- Wooden bowl
- Wooden paddle
- Quart size jar with lid
- Blender
- Rubber scraper
- Water
- Salt
- Pasteurized whipping cream

B. Procedures for this activity (with helpful hints)

1. Pour cream into jar
2. Shake jar until cream thickens
3. Add a little water to jar as mixture thickens
4. Scrape mixture into wooden bowl and press out milk
5. Wash remaining mixture in water
6. Pour water off until water is clear
7. Salt butter (remaining mixture) lightly
8. Put butter on plate
9. Shape butter into desired design

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PANCAKE SUPPER

II. ACTIVITY FORMAT:

A. Tools and Materials

Tools necessary for each item to be made:

Frying pans
Pancake turners
Spoons
Measuring cups
Bowls - mixing
Coffee pots
Cream and sugar servers
Pencils
Cash register (?)
Broom
Map
Knives and forks
Trays
Additions by children

Materials necessary for each item to be made:

Paper plates (plastic coated)
Milk
Eggs
Mix
Napkins
Coffee
Sugar
Cream (dry?)
Oil
Syrup
Meat (bacon and sausage)
Paper (mats - tablecloth)
Cloth (aprons)
Thread
Towels
Soap
Sponges

B. Procedures for this activity (with helpful hints)

1. Research recipe (2 or 3)
2. Cost of ingredients and/or material
3. Selling cost
4. Advertising
5. Arrange for materials and facilities
6. Prepare tablecloths, menu, aprons, place mats, music
7. Select work assignments and assign
8. Obtain material for pancakes, etc.
9. Serve supper
10. Clean up
11. Figure profit and allocate same

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BAKING ROLLS (QUICK YEAST BREAD)

II. ACTIVITY FORMAT:

A. Tools and Materials

2 pkg. dry yeast
1 cup lukewarm water
1 teaspoon sugar
1 cup milk - scalded

2 1/2 teaspoon salt
1/3 cup sugar
2 eggs, well beaten
1/6 cup melted shortening

1/6 cup melted
butter
6 1/2 to 7 cup
sifted all-
purpose flou

Mixing bowls
Measuring cup
Measuring spoons
Baking pans

Sauce pan
Knife
Wire mixer

B. Procedures for this activity (with helpful hints)

METHOD

Sift flour into large bowl and set aside.

Soften yeast in lukewarm water with 1 teaspoon sugar in large mixing bowl. Have another bowl, greased with Crisco or Pam ready.

Bring milk to boil in sauce pan (scald). Take off heat, add salt and 1/3 cup sugar. Cool to lukewarm by setting mixture in pan in another pan with cool water in it. When mixture is cooled, add to yeast in bowl along with the 2 beaten eggs.

Melt shortening, butter mixture in small pan over heat. Cool in larger pan with cool water in it.

Add 4 cups flour into yeast - egg mixture and beat until smooth. Add melted cooled shortening, butter mixture and again beat until smooth. Stir in and knead enough flour to make a smooth, elastic dough, but not too stiff.

Place in greased bowl, turning dough over once. Cover bowl. Let rise in cozy warm place (85 degrees) about 1 hour, or until double in size. Then turn out onto lightly floured board and shape into rolls or three loaves. Place into greased pans - cover. Let rise again in warm place until double, about 30 minutes.

Bake in moderate oven (400 degrees) 15 - 20 minutes for rolls. Bake loaves 20 minutes at 400 degrees, then reduce heat to 350 degrees and bake 20 minutes longer. Let loaves cool before taking them out of pans.

MAKES 2 DOZEN ROLLS OR 3 SMALL LOAVES.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING POPCORN BALLS

II. ACTIVITY FORMAT:

A. Tools and Materials

Popcorn
Popcorn popper
Syrup

B. Procedures for this activity (with helpful hints)

1. Assembly line stations
    - a. Pop the popcorn
    - b. Measure and prepare syrup
    - c. Put popcorn and syrup together - form into balls
    - d. Cooling table
    - e. Packaging table
    - f. Pricing table

2. Selling at the fair

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BREAD MAKING FROM STARTER

II. ACTIVITY FORMAT:

A. Tools and Materials

Hot plate
2 small pans
Measuring spoons
Cups
Fork
Spoon
Bowls
1 bread board

1 medium sized potato
flour
1 cup milk
1 1/2 teaspoon salt
1 bread pan
1/2 Tablespoon sugar
1 Tablespoon shortening

B. Procedures for this activity (with helpful hints)

Prepare Starter

Cook 1 medium-sized potato in a small pan with enough water to cover it. After it is soft, mash it thoroughly in water in which it's cooked. Add 1 1/2 teaspoons salt, 1/2 tablespoon sugar, and 1/2 cup flour. Mix thoroughly, adding more water if necessary, until the consistency is that of thin buttermilk. Set in a warm place until the mixture begins to bubble.

Set the Sponge

On the evening preceding the baking day, set aside a small portion of the starter, and mix the remainder with enough flour to make a batter that will hold together but light enough to drop from a spoon. Set this batter in a fairly warm place overnight so it will become bubbly and spongy. In the morning, take out a small amount of the sponge, and add it to the starter that was saved.

Mix and Bake Bread

Scald 1 cup of milk, add 1 tablespoon shortening, and let cool. Add 1 cup flour, stirring well. Add the sponge and mix. Mix with flour until a dough is made that can be kneaded. Turn out on a floured board and knead until smooth, about 5-10 minutes. Place in a greased bowl, set in a warm place to rise. When it has doubled in size, punch down and let rise again until almost double in size. Mold into loaf, place in a greased pan, and let rise again until double in size. Bake moderately in a hot oven. 45-50 minutes.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: HUMAN BIOLOGY

GRADE LEVEL: 6

GENERAL OVERVIEW: A study of the major systems of the body and careers related to the medical profession, including the area of cosmetology.

TEACHING/LEARNING RESOURCES:

1. Reference Materials:

Books:
- Science Milestones, Science Digest
- Mr. Wizard's Science Secrets, Don Herbert
- 101 Science Projects, George Stone
- Science in the Elementary School

Movies:
- Digestion in Our Bodies
- Human Body - The Digestive System
- Human Machine
- Nutritional Needs of Our Bodies
- Breathing
- The Respiratory System

Filmstrips:
- Your Heart and Lungs
- Digestion of Foods
- Our Health Department
- Public Health
- Anthony Van Leeuwenhoek
- Louis Pasteur
- William Harvey
- Your Bones and Muscles
- Your Muscles

Pictures:
- Health Helpers
- Medical Helpers

2. Field Trips:

Beaumont Hospital
Ambulance Service
Oakland County Health Department
S.E.O.V.E.C. - Dental Assistant Program

3. Human Resources:

School Nurse
Receptionist in Doctor's Office
Registered Nurse
Public Health Nurse
Students from S.E.O.V.E.C. Dental Health Program
Dietician from Hospital
Student in Make-up from Macomb Community College

4. Activities:

Dissecting animal organs
Hatching of eggs
Taking temperatures, blood pressure, pulse
Quiz Bowl Game
Booklet of drawings
Cleaning teeth
Balanced diets
"Growing Up" Program
Microscopic use - cells
Model of the lungs
Model of the arm
Model of a spirometer
Model of a stethoscope
Model of blood circulation
Watching make-up demonstration and then apply own make-up

UNIT TITLE: HUMAN BIOLOGY

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Science	
Cells	Examine, identify, compare and contrast the various parts of cells
Tissues	Identify various tissues within the human body
Organs	Identify and differentiate between various organs within the human body
Systems	Discover and discuss critically the main systems of the human body
Health and Safety	Recognize and cite evidence for good health and safety practices
Drugs	Discuss critically, and identify the variables involved in drug use and abuse
Nutrition	Compare and contrast menus recorded of individuals' meals (for a week)
	Plan meals that are necessary for a balanced diet
Skin Care	Identify the variables in applying make-up to one's face and relate why this is necessary for a good, healthy skin
Eyes, Ears	Identify and describe the principle parts and functions of the eye and ear

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Examine many different slides of cells under a microscope	
Role-playing	
Have students keep a record of their food intake for a week	
Use models from Instructional Materials Center	

UNIT TITLE: HUMAN BIOLOGY (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Math	
Measurement	Measure and compute weight of another student and convert weight to ounces, pounds, grams, kilograms, etc. Compare and contrast weights computed of humans to those of animals of the same age Compute blood pressure of other individuals in class Compute heart beats per minute while engaged in various activities
Language Arts	
Spelling	Recognize, use and spell correctly terms related to health and the human body
Writing	Differentiate the various forms of letter writing and apply this knowledge

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Write thank-you letters, business letters, etc.	

UNIT TITLE: HUMAN BIOLOGY (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Art	
Drawing	Prepare diagrams of body systems
	Identify individual organs on the diagram
	Prepare diagrams of different kinds of cells found in the body
Careers	
People and their job roles:	Discuss critically jobs associated with the health, medical and nutritional fields
Working conditions	Identify the variables, compare and contrast the working conditions of jobs in the health, medical and nutritional fields
Servicing	Distinguish between the services provided by various jobs in the above mentioned fields
Producing	Investigate various products (such as artificial limbs, kidney machines, etc.) manufactured for the purposes of aiding various functions of the human body

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Using trade books, overhead transparencies, etc., to draw diagrams	
Have guest speakers come in and speak with the students	
Field trips	
Models could be made of some of these products	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

DISSECT HEARTS

II. ACTIVITY FORMAT:

A. Tools and Materials

1 pluck (sheep)
plastic straws
5 pig hearts
Microscopes
Scissors
Newspapers

B. Procedures for this activity (with helpful hints)

1. Put straw through left auricle, through mitral valve to left ventricle, cut along straw. Clean out clots.
2. Repeat above process on right side. Hints, use newspaper to cover desk, have large plastic bag for disposal, have microscopes to examine tissue.
3. Pluck - a. Discuss organs
    b. Cut pieces of lungs - have child insert straw and blow to cause lung to expand

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

APPLYING OWN MAKE-UP FOR PLAY

II. ACTIVITY FORMAT:

A. Tools and Materials

Cold Cream for base
All kinds of cosmetics

B. Procedures for this activity (with helpful hints)

1. Each applied own make-up as closely as they could to earlier demonstration.
2. Flood lights must be used in play in order to make this effective.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

STAGE MAKE-UP DEMONSTRATION

II. ACTIVITY FORMAT:

A. Tools and Materials

Volunteer
Theater Make-up

B. Human Aides and Resources

Student from Macomb Community College

C. Procedures for this activity (with helpful hints)

1. We picked the main elf to be made up
2. Talked about importance of using proper base
3. Stage uses a grease paint, but told us how to use cosmetics
4. Demonstrator showed us how not to have make-up patchy - how to make a person old or young, and highlight features
5. Must be able to see features in last row

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A SPIROMETER

II. ACTIVITY FORMAT:

A. Tools and Materials

Metal cutter
5 inch metal kitchen funnel
1 gallon glass jug
Rectangular acquarium
8mm tubing (rubber)
Straw
Ruler

B. Procedures for this activity (with helpful hints)

Please see 101 Science Projects by George K. Stone, p. 3.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A MODEL TO SHOW HOW THE LUNGS WORK

II. ACTIVITY FORMAT:

A. Tools and Materials

Scissors
Lamp chimney
1-hole rubber stopper
Glass tubing
Rubber band
Rubber balloon - large
Rubber balloon - small

B. Procedures for this activity (with helpful hints)

Please see p. 605 in Science for the Elementary School by Edward Victor

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A MODEL OF A STETHOSCOPE

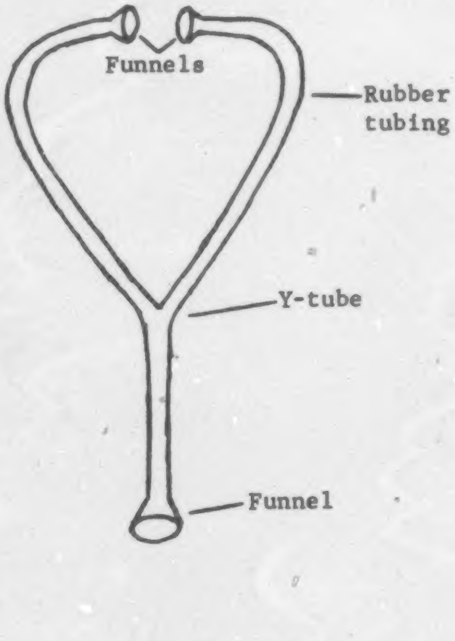
II. ACTIVITY FORMAT:

A. Tools and Materials

3 funnels
3 pieces of rubber tubing
1-Y piece of glass tubing

B. Procedures for this activity (with helpful hints)

1. Make a stethoscope from 3 funnels, a glass tube or T-tube plus one short piece of rubber tubing and 2 longer pieces of rubber tubing (see diagram)
2. Let the kids take turns listening to heartbeats
3. Compare the heartbeats of the kids when they are quiet with their heartbeats after they have jumped up and down 15 or 20 times or exercised vigorously



SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT PLANSHEET

TITLE: MAGNETISM AND ELECTRICITY

GRADE LEVEL: 6

GENERAL OVERVIEW: Based on science guide unit: "Investigated magnetism, electricity, how they are related and how man uses them."

TEACHING/LEARNING RESOURCES:

1. Reference materials: Films, filmstrips, loops, books, etc.

Films: from Detroit Edison Company
from Consumers Power Company

Film loops: from L.E.T. office

Filmstrips: from Detroit Edison Company

Books: from L.E.T. office

Pamphlets: from Detroit Edison Company
from Consumers Power Company

Royal Oak Science Guide, pages ME 19 to ME 27

2. Field Trips: (within and out of school)

Edison plant of St. Clair
Detroit Edison Company

3. Human Resources: (role models, parents, students, school personnel)

Royal Oak Schools Electrician
Royal Oak Schools Assistant Electrician

4. Activities: (role playing, hands on activities, interviewing)

Made permanent magnets
Made electromagnets
Made electromagnetic games, telegraph, fuses
Made complete electrical circuits with power sources, conductors, appliances and switches
Kept a notebook of occupations in the field of electricity
Make a bulletin board of occupations in the field of electricity

UNIT TITLE: MAGNETISM AND ELECTRICITY

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Sciences	
Economics	Prove that electrical power is an efficient source of power
Science	
Magnetism:	
magnetic materials and non-magnetic materials	Recognize which materials are magnetic and shows a magnetic field
magnetic fields	
electromagnets	List materials necessary for electromagnets
Electricity:	
conductors and insulators	Discover materials that act as a conductor or insulator of electricity
circuits	Explain the electrical current in series, parallel and simple circuits
cells and batteries	State reason for electrical operation of cells and batteries
	Differentiate between cells and batteries

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Make electromagnetic games, telegraphs, fuses	
Make permanent magnets Make electromagnets Make electrical circuits (various types) Making electrical circuits	

UNIT TITLE: MAGNETISM AND ELECTRICITY (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Mathematics	
Linear measure	Measure accurately materials used in constructing electrical equipment
Electrical measures	Compute ohms, amps, volts and voltage (ohms law)
Language Arts	
Record information	Write up observation of experiment
Oral discussion	Discuss occupations using magnets and electricity
Spelling	Spell correctly 15 related words

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Make electrical equipment	
Introduce electricity units by building bulletin board on occupations	

UNIT TITLE: MAGNETISM AND ELECTRICITY (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers	
People and their job roles: Servicing	List two occupations which people maintain and repair products which have electromagnets
Producing	Construct an electrical apparatus
Personnel	Predict favorable working conditions
Working conditions	List six favorable working conditions of an industry

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Write a report on two service occupations in electricity Make electrical equipment (games, telegraphs, etc.) Role playing showing different kinds of working conditions	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ELECTROMAGNET CONSTRUCTION

II. ACTIVITY FORMAT:

A. Tools and Materials

Insulated wire
Dry cells
Large nails

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Wrap insulated wire, about six turns, around a large iron nail.
2. Connect the bare ends of the wire to the terminals of the dry cell.
3. Count the number of thumb tacks the nail picks up.
4. Double the turns of the wire around the nail.
5. Count the number of thumb tacks the nail picks up.
6. Wire together two dry cells.
7. Count the number of thumb tacks the nail picks up.
   See pages ME 19 to ME 27 of the Royal Oak Science Guide for other related activities.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ELECTROMAGNETIC GAMES, FUSES, TELEGRAPHS

II. ACTIVITY FORMAT:

A. Tools and Materials

Size 48H bulbs
Plywood 1" X 4" (pine)
Screws
Nails
Metal from tin can
Gum wrapper foil
Insulated copper wire
Dry cells
Cardboard

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Students make sketch of project from book.
2. Decide on materials needed for construction.
3. Students assemble materials, proceed on construction.
4. When making electromagnetic games, cut out small figures, otherwise electromagnet may not be strong enough to pull across cardboard.

Bulletin Board of Electrical Occupations

1. Brainstormed together
2. List brainstormed jobs on board
3. Make bulletin board of jobs brainstormed and listed

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT PLANSHEET

TITLE: A POLITICAL SYSTEM

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this unit, the political system of the United States, units have been combined to encompass the areas of elections and courtroom procedures.

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Books: Concepts and Values, Book 5
How Our Government Helps Us, Benefic Press
Primary Supplementary Social Studies Program

Films: American Presidency
White House Past and Present
Profile of the Presidency

Realia: Campaign Materials Old and New
Reproductions of Old Campaign Buttons (Standard Oil)

Pamphlets: 1972 American Voter - General Motors
Newspapers and magazines
Guide to Voting Procedures
Procedures for Election Workers

2. Field Trips:

Royal Oak City Hall (to observe a court case)
Historical Shop, Royal Oak
Visits to city, county, state and federal offices

3. Human Resources:

An elected city official
A representative from each of the major party headquarters
Someone with historical realia (i.e., old campaign buttons, dishes, etc.)
Poll worker

4. Activities:

Brainstorming - beginning activity to find out what students know
Nominations of candidates
Campaign speeches and rally
Campaign posters and literature
Voter education (2 students to each room to instruct students as to how voting booth works)

Construction of booths
    a) secret ballot
    b) for non-readers - pictorial ballots
Tallying votes (counted rolls in rooms)

UNIT TITLE: A POLITICAL SYSTEM (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers	
People and their job roles:	Propose and defend reasons for jobs affiliated with government (including courts)
Managing	Organize classroom election from convention to voting
Producing Distributing	Produce and distribute campaign materials
Servicing	Prepare materials to advertise the campaign
	Discuss critically the services provided by the courts
Personnel selection	Discuss critically the procedure for selection of candidates
	Identify the variables in the wages, working conditions and fringe benefits of various candidates
Job Mobility	Identify the variables of what may happen to those people not elected

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Role playing	

UNIT TITLE: A POLITICAL SYSTEM (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Language Arts Writing	Prepare campaign literature for classroom election Prepare thank-you notes for resource people, realia and field trips Prepare a political ad from a positive point of view
Art Design	Make campaign posters and campaign buttons
Music Songs	Discover and examine campaign songs

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Make posters	

UNIT TITLE: A POLITICAL SYSTEM

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Sciences	
Political Parties	
History	Discuss critically the history and evolution of political parties in the United States
Race	Examine and justify the role political parties play in the United States
Government Branches	Discuss critically the responsibilities of each of the 3 branches of government: (judicial, executive, legislative)
	Recognize and cite evidence for a system of checks and balances
Voting	Prove that voting is a privilege and a responsibility
Math	
Number System	Compute electoral college votes and delegate votes
Percent	Compute portion of the total vote needed to win an election, to be shown in graph or chart form
	Compute how many people in the voting community voted

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Role playing Role playing	
From election held	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ROLE PLAYING COURTROOM SCENE

II. ACTIVITY FORMAT:

A. Tools and Materials

classroom
jury
judge

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Set up a mock courtroom scene
2. Simulate a court case
3. Role play jobs of people involved in courtrooms including:
    a) judge
    b) policeman
    c) recorder
    d) lawyer
    e) clerk
4. Decide case
5. Discuss education needed for each of the above-mentioned jobs

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. **NAME OF ACTIVITY**

VOTING BOOTH

II. **ACTIVITY FORMAT:**

A. Tools and Materials

string
one freezer crate for 2 voting booths
cardboard cutter
three dowel rods per booth (2 for voting roll and one for the curtain
curtains
roll paper
rulers and yardsticks
magic markers
oak tag
pipe cleaners

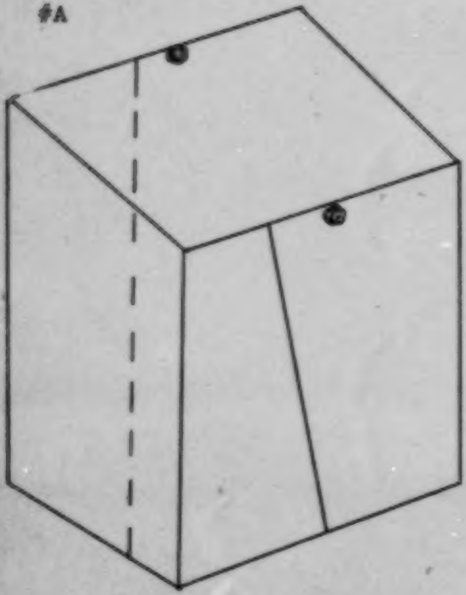
B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

1. Cut crate in half
2. Make holes for large dowel that will hold curtain
3. Make holes at #1 and #2 in illustration B
4. Mark rolls of shelf paper into two inch sections on one side, and two inch columns on the other (columns for the voters)

#A



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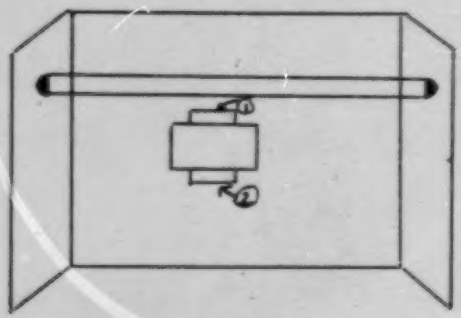

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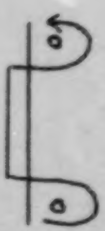


FULL ROLL AT BOTTOM

PEANUTS PARTY ☐

FRANK B.	PRESIDENT
JOANNE G.	VICE-PRESIDENT
CINDY C.	SECRETARY

POLITICAL PEOPLE ☐

KYLE R.	PRESIDENT
CRISSY L.	VICE-PRESIDENT
LISA D.	SECRETARY

INSTRUCTIONS: YOU ARE TO MARK YOUR BALLOT FOR ONE PARTY ONLY. YOU CANNOT DIVIDE YOUR VOTE BETWEEN THE TWO PARTIES. VOTE FOR THE PARTY OF YOUR CHOICE BY MAKING AN X IN THE SQUARE BY THE PARTY NAME. BALLOTS NOT CORRECTLY MARKED WILL BE CONSIDERED VOID AND NOT COUNTED.

* * *

THIS IS TO CERTIFY THAT ____

IS A CITIZEN IN GOOD STANDING IN ROOM 122 AND IS ENTITLED TO VOTE IN THE CLASSROOM ELECTION.

DATE	SIGNATURE
____________	______________________________

* * *

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CLASSROOM ELECTION

II. ACTIVITY FORMAT:

A. Tools and Materials

None

B. Human Aides and Resources

The secretary, principal and the other fifth grade teacher who helped in voter registration

C. Procedures for this activity (with helpful hints)

Divide the class by random sampling into two political parties. I appointed temporary chairmen. Each group then:

1. Chose a name and official party symbol
2. Selected (in our case by voting) candidates for the offices of president, vice-president and secretary
3. Produced campaign posters with direction that nothing could be said against someone else - everything must be positive in favor of; not negative against
4. Register to vote by proving they were a citizen of Room 122* to the other fifth grade teacher. (Some used their office card, some the C.A.-10 books, some papers that I had written comments on, etc.)
   *I had to prove I taught in room 122!
5. The registration certificate had to be produced on election day before a child could receive a ballot. When each child voted their certificate was "voided" by being rubber stamped with a carved eraser stamp
6. Each child voted in a study carral and placed their ballot in a sealed box. (We did this on election day.) Ballots not marked correctly were destroyed.
   Several children lost their certificates and were unable to vote
7. All campaign posters in the room and hallway (within 100 yards of the polls) were removed before election day
8. The polls closed and opened at official pre-stated times
9. One child voted "absentee" by ballot sent home and returned by mom in a sealed envelope
10. A representative from each party helped me count the votes - one reading the vote aloud and the other confirming it as I tallied it

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MASS PRODUCING CAMPAIGN BUTTONS USING ASSEMBLY LINE TECHNIQUES

II. ACTIVITY FORMAT:

A. Tools and Materials

Oak tag
pins
magic markers
template patterns made by each party

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Each party was divided into three assembly lines
2. Children were allowed to choose their jobs, i.e., coloring, cutting, etc.
3. Foremen were volunteers
4. Each "line" made as many buttons as possible in the allotted time
5. Nothing was said about quality until after work period
6. We brainstormed after to find out what we could or should have done differently - the biggest criticism was: "we should have planned more."
7. Quality control inspection eliminated all buttons not symmetrical in shape, with misspelled words and not colored to pre-set specifications

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BRAINSTORMING

II. ACTIVITY FORMAT:

A. Tools and Materials

chalkboard
chalk

B. Human Aides and Resources

A classroom of children
Several students to record ideas

C. Procedures for this activity (with helpful hints)

Listed advantages and disadvantages of being president of the United States kicked off by question, "Why would anyone want to be president of the United States?"
Used many of the ideas as headings for an on-going political bulletin board titled, "The World of Work in Politics."
Included:

- a) Secret Service
- b) Newswriters
- c) Cartoonists
- d) Newscasters
- e) Families
- f) Sales and advertising

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT PLANSHEET

TITLE: PRODUCING AND RETAILING

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this Production and Retailing section, many units have been integrated as a tentative guide for ideas. The following sections are included:

Newspaper Drive
Production and Retailing
UNICEF

Throughout all sections run the following themes: economics, incorporation and operation of a company and product production, utilization and disposal.

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Books: The Social Sciences Concepts and Values, Harcourt Brace Javonovich, Inc.: n.t. 1970
Elementary School Math Book 6, Addison Wesley Publishing Company, 1971
Books on industry, banking, economics
Career Opportunities, American Association of Ad Agencies, Inc., 200 Park Avenue, New York, N. Y. 10017

Films: ABC's of Hand Tools, Part I and II
Our Productive Resources
The Assembly Line in Modern Technology
History of Money

Filmstrips: What One Half Means
Measuring How Long
Introducing Economics Series
Andy and Bank Series
What is Automation

Cards: Tax exemption
Social Security

2. Field Trips:

Cranbrook Science Room
Ford Motor Company - Wixom plant
Wayne Oakland Bank
Burger King
W. T. Grant
Lumber scrap yard
Apple Orchard

- Bakery
- S.E.O.V.E.C.
- Swift Premium Company
- Royal Oak Waste Paper and Metal Company

3. Human Resources:

   - Carpenter
   - Accountant
   - Small businessman
   - Salesman
   - Payroll clerk
   - Banker or credit union manager
   - Person from Department of Weights and Measures
   - Sales representative from Swift Premium Advertising Company
   - Art teacher
   - Manager from W. T. Grant

4. Activities:

   Role Playing:

   - Brainstorming for responsibilities
     - Select jobs
   - Produce booklets on an assembly line
   - Manager
   - Interviewers
   - Workers
   - Secretaries
   - Supply Clerk
   - Banker and Accountant
   - Tax collector
   - Insurance agent
   - Medical Personnel
   - Paymaster

   Activities:

   - Payday
   - Apply for Job
   - Construct Wooden Book Shelves
   - Construct Wooden Book Holders
   - Bag Holder
   - Booklets produced via assembly line
   - Automobile Mass Production
   - Geoboards
   - File Boxes
   - Bulletin Board of Jobs
   - Silk Screening of Pennants, Banners and Cushions
   - Boomerang Puzzle
   - Tic Tac Toe Board
   - Selling Door to Door
   - Keeping Up Territory Sales Maps
   - Develop Sales Vocabulary
   - Collection and Unloading of Paper at Scrap Yard
   - Work Study Program at Grant's

Making a Slide-Tape Presentation for Parents
Newspaper Collection

UNICEF Activities:

Advertising
Setting up bookkeeping books for each company formed
Make menu and order food
Shopping
Cooking
Setting up production line
Clean-Up
Collecting labels from commercial products for UNICEF
Trick or Treat for UNICEF

UNIT TITLE: PRODUCING AND RETAILING - NEWSPAPER DRIVE

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Science	
Supply and Demand	Identify the variables that affect the cost when there is an over-supply of a product
Cooperation	Propose reasons and defend them why the whole group will benefit from the project even though some members do not help or participate
Math	
Profit	Compute profit each week
Graphing	Make a bar graph to keep track of weekly totals of money taken in
Division	Compute amount of money which must be taken in each week in order to reach desired goal for the year
Banking	Prepare a bank account and apply concepts of banking so that weekly earnings may be deposited

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
When delivery of old newspapers is made at scrap yard the price is posted. It varies from week to week between 40¢-50¢ cwt (cwt = hundredweight) Volunteers to help collect and do the weekly work of collecting and delivering newspapers. Kids will soon see who does the work	
Add new information to bar graph weekly Divide - Ex.: needed $100 how much per week? Observe jobs at a bank	

UNIT TITLE: PRODUCING AND RETAILING - NEWSPAPER DRIVE (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers	
People and their job roles:	
Purposes	Discuss critically the various jobs which are required to operate a scrap yard
Servicing	Recognize and cite evidence for a system of recycling products (i.e., newspapers, scrap metal) Identify methods of altering used products so that they may be recycled

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Visit scrap yard	
Visit scrap yard	
Visit scrap yard	

UNIT TITLE: PRODUCTION AND RETAILING

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Science	
Economics	Discuss critically the U. S. economic system including (taxes, insurance, salaries, welfare and cost)
	Identify the variables in the costs of production (raw materials, labor, property, equipment)
	Identify the variables in the costs of distribution and market demands
	Compare and contrast the costs involved in handmade products VS automated products
History	Propose and defend reasons for individual construction and assembly line production with regards to the Industrial Revolution
Science	
Change (chemical & physical)	Discuss the chemical and physical changes which may occur in the process of making a finished product from a raw material
Machines	Identify and recognize and discuss the application of the 6 basic machines (lever, screw, wheel and axle, wedge, pulley, inclined plane)

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS

UNIT TITLE: PRODUCTION AND RETAILING (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Math	
Measurement	Measure and compute materials necessary for a product to be made
	Compare measures of bushel, one-half bushel, peck, pound in the apple business
Cost-profit	Identify costs and compute profit for products made
Percent	Compute the depreciation of a product's buildings and equipment over a given period of time
Banking and Accounting	Devise and apply methods of banking and accounting as they relate to a classroom company
	Use a checkbook
Payroll	Construct payroll plan by which company employees will be paid
Language Arts	
Writing and Speaking	Write ads to advertise products
	Write a sales promotion speech
	Write orders for products to be made
	Speak to groups to advertise products

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Make various projects	
Buy materials, keep records - compute profits	
Role playing	
Write advertisements to be given to various other classes	

UNIT TITLE: PRODUCTION AND RETAILING (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Art	
Design	Design and make posters for the purpose of advertising products
Lettering	Make appropriate lettering for needed projects
Graphic Communication	Manipulate apparatus needed in the process of silk-screening
Careers	
People and their job roles:	
Reasons Functions Locations	Identify, describe and apply the duties and responsibilities of the managing, financing and production personnel necessary to run a company
Managing	
Planning and Organizing	Gather data, manipulate ideas, organize data and apply findings in the formation of a company
Producing	
Purchasing Materials	Differentiate among materials so as to purchase the most appropriate ones for product produced
Processing	Apply methods of forming, separating and combining where necessary to produce desired product

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Make posters and put up around school to advertise Silk-screening	
Make products	

UNIT TITLE: PRODUCTION AND RETAILING (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
Careers (Continued)	
Packaging	Prepare packaging materials for products manufactured
Servicing	Do the following as it relates to the product: a) distribute b) advertise c) sell d) repair
Personnel	
Interviewing	Identify personal qualifications relative to a particular job
Training	Identify needed background for a particular job
Working Conditions	Compare and contrast the economic rewards, physical environments and social environments of various jobs

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Role play interviewing	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING APPLE PIE

II. ACTIVITY FORMAT:

A. Tools and Materials
(Approx. size of class - 15)

15 cups sifted flour
4, 5 tsp. salt
4 cups shortening
24 tbsp. water
2 cups white sugar
3 tsp. cinnamon
20 cups apples
(sliced thin)
3 cups brown sugar
1-1/3 cups butter

Measuring cups
Rolling pins
Mixing bowls
Pastry blender
Pie pans
Paring knives
Forks
Measuring spoons
Clean up materials

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

This activity is in two parts. First, students are placed in assembly line stations and do various duties they are responsible for. Next students take individual ingredients back to their seats and complete their pie.

Before all activity starts, areas and people involved should be inspected for CLEANLINESS.

Stations on assembly line:

WORK AREA I

1. Apple peelers - several
2. Apple corers - several
3. Apple slicers - several
4. Apple mixers - several

WORK AREA II

1. Pie crust makers - several
2. Pie crust rollers - several
3. Dough cutters - several
4. Pie Pan Fitters - several

Routine:

Apples are cleaned, peeled, cored, and sliced, then placed in containers where an apple mixer mixes necessary ingredients with the apples to make the appropriate pie filling. In a different area the pie crust is made, rolled and fitted into pie pans. At the completion of both work areas, individual students take necessary ingredients from each area and produce their own pie.

WORK AREA I - Apple Mixer's Directions:

Mix in bowl the following ingredients:

2 cups white sugar
3 tsp. cinnamon
1/2 tsp. salt
20 cups thin apple slices

Mix in separate bowl:

3 cups brown sugar
3 cups sifted flour
1-1/3 cups butter

WORK AREA II - Pie Crust Makers' Directions:

12 cups sifted flour
4 tsp. salt
4 cups shortening
24 tbsp. water

Note: This is a large quantity. More would be gained by using smaller recipe and several mixings to allow uniform mixture of ingredients and a more easily mixable dough.

Mix flour, salt and shortening together with pastry blender until mixture holds firmly together. Add water, stirring mixture into a ball, making sure flour is moistened. Divide dough into 5 parts. Roll out dough 2 inches larger than pie plate; fit in pan. Fold up extended 2 inches of pie crust to edge of pan; flute between thumbs and forefingers. Prick crust with fork.

Individual students will then place mixed apples in pie shell, take the blended brown sugar, flour and butter, and sprinkle lightly over the apples. The student has a choice of topping pie with more crust or the brown sugar, flour and butter. The pie will be baked for 35 minutes at 400 degrees.

All left-over ingredients will be frozen and used at a later date to demonstrate how freezing is used to preserve foods.

APPLICATION BLANK ROOM 22

1. Name ____________________

2. Age ____________

3. Address ____________________

4. Phone ____________

5. What jobs would you like to do? Choose three.

PAYMASTER (1)
INSURANCE AGENT (1)
TAX COLLECTOR (1)
WELFARE AGENT (1)
SECRETARIES (2)
INSPECTORS SUPERVISOR OR FOREMAN (2)
CUSTODIAN (1)
NURSE (1)
SUPPLY CLERKS (2)
MANUAL LABORERS

6. Put this list of words into alphabetical order and number them. Copy the list in your best handwriting.

choose
water
green
sticks
pizza
write

automobile
survey
glue
car
agent
please

1.
2.
3.
4.
5.
6.

7.
8.
9.
10.
11.
12.

7. List five people in your room that you would obey if they are chosen to be your boss.

1.
2.
3.
4.
5.

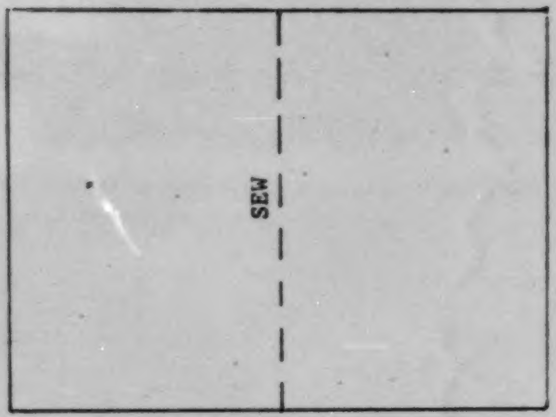
AUTOMOBILE MASS PRODUCTION

Parts List Per Car (Multiply number of parts of length of wood to determine total material needed per class)

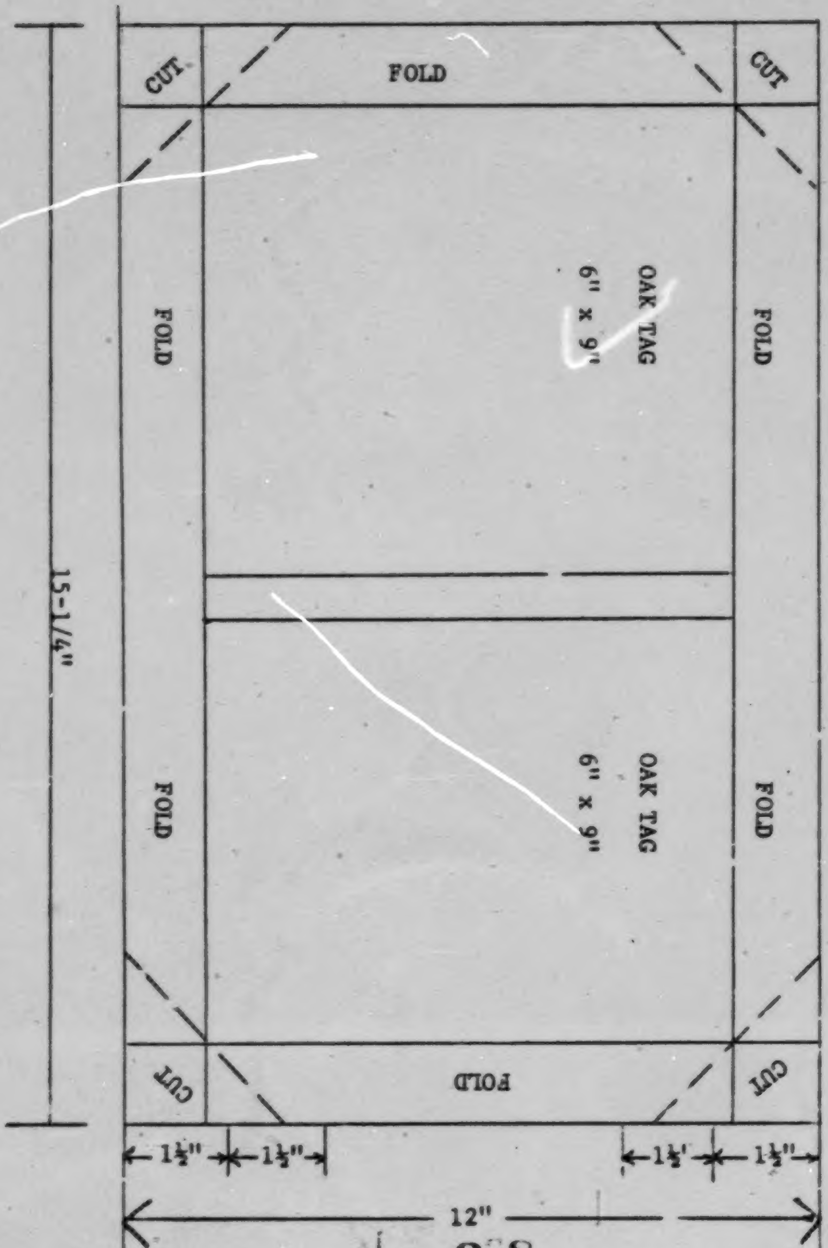
4	Wheels
*2	Coathanger wire, 4-1/2"
4	1/2" Staples
*1	Pine, 3/4" x 1-1/2" x 8"
*1	Pine, 3/4" x 3-1/2" x 8"
4	Brads, 1"
4	1/8" I.D. - 3/8" O.D. Steel Washers

*Denotes pieces

(1) Cut 3-1/2" wide floor board to 8" length
(2) Mark axle lines 1" from end of floor board
(3) Cut 3/4" x 1-1/2" blocks to 3-1/2" lengths
(4) Nail hood to base (2 nails)
(5) Nail cab to base (from bottom)
(6) Nail staples to the bottom of the floor boards
(7) Sand front of truck
(8) Sand sides of truck
(9) Inspect
(10) Attach wheels and axle to staples (use 2 washers)
(11) Cut axles to 4-1/2" lengths
(12) Attach one (1) wheel to axle
(13) Inspect wheel alignment
(14) Attach headlights
(15) Final inspection



WRITING PAPER
8-1/2x11"


CUT
FOLD
CUT
FOLD
OAK TAG
6" x 9"
FOLD
FOLD
OAK TAG
6" x 9"
FOLD
CUT
FOLD
CUT
15-1/4"
1½"
1½"
1½"
1½"
12"

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ASSEMBLY LINE PRODUCTION OF BOOKLETS

II. ACTIVITY FORMAT:

A. Tools and Materials

construction paper
writing paper
rulers
needles
tape
glue
scissors
thread

B. Human Aides and Resources

Two parents

C. Procedures for this activity (with helpful hints)

1. Lay out construction paper to desired dimensions (see drawing)
2. Cut off excess paper and fold
3. Count out the desired number of writing paper and background paper
4. Sew writing paper together
5. Place oak tag into folded portions of construction paper
6. Tape oak tag
7. Glue writing paper onto oak tag

Student jobs:

1. Layout
2. Cutters and folders
3. Oak tag cutters
4. Paper counters
5. Sewers
6. Tape oak in booklets
7. Final assembly

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BULLETIN BOARD OF "JOBS"

II. ACTIVITY FORMAT:

A. Tools and Materials

magazines
newspapers

B. Human Aides and Resources

Parents

C. Procedures for this activity (with helpful hints)

1. Youngsters brought pictures, articles, etc. from home
2. Group classified these as to products or services
3. Group classified these then as to type - sports, etc.
4. Group arranged a bulletin board

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CONSTRUCTING WOODEN BOOK HOLDERS

II. ACTIVITY FORMAT:

A. Tools and Materials

saws (dremel, coping, crosscut)
vises and clamps (bench)
two 8" x 8" plywood (to 1/2" thick)
sandpaper blocks
stain for wood
varnish or shellac
sandpaper
wood files

B. Human Aides and Resources

Teacher's aide
Learning Resource Teacher
(Parents and carpenters also suitable)

C. Procedures for this activity (with helpful hints)

1. Cut 8" x 8" plywood squares from sheet. Dremel saw will cut to 1/2" thickness. Otherwise, coping or crosscut saws required
2. Outline form of book holders onto plywood squares with pencil or crayon
3. With thin blade in dremel saw or with coping saw, cut pattern of book holders from square
4. File edges of book holders with wood file if edges are rough
5. Sand book holders smooth with grain: with coarse or medium and fine (to finish) sandpaper (coarse or medium determined by how rough wood is)
6. Stain or prime book holders. Let dry
7. Shellac, paint or varnish book holders. Let dry

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CONSTRUCTING WOODEN BOOK SHELVES

II. ACTIVITY FORMAT:

A. Tools and Materials

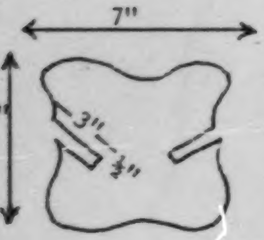
saws (coping, crosscut, dremel)
vises and clamps (bench)
two 8" x 7" plywood (to 1/2" thick)
sandpaper blocks
sandpaper
wood stain
varnish or shellac
wood files

B. Human Aides and Resources

Teacher's Aides
Learning Resource Person (carpenters, parents also suitable)

C. Procedures for this activity (with helpful hints)

1. Cut 7" x 8" plywood squares from sheet. Dremel saw will cut to 1/2" thickness. Otherwise, coping or crosscut saws desirable
2. Outline pattern of book shelves on plywood squares with pencil
3. With thin blade in dremel saw or with coping saw, cut patters from plywood squares
4. File edges of book holders if rough with wood file
5. Sand book holders with grain until very smooth - begin with coarse or medium sandpaper (depending on how rough wood is). Finish with fine sandpaper
6. Stain or prime book shelves. Let dry
7. Paint, shellac or varnish book shelves. Let dry
8. Cut 8" x 3" x 1/2" (two) boards of plywood. Sand, prime and paint. Let dry
9. Insert wood boards into slots of pattern



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SALESMAN OR DISTRICT MANAGER

II. ACTIVITY FORMAT:

A. Tools and Materials

None

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

1. Each group met as a territory
2. Criteria to be a manager:
    a) Have sold door to door
    b) Volunteer to apply for job
3. Each volunteer had one minute to prepare WHY he would make a good manager
4. Each presented their talk
5. Election was held

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

DISTRICT MANAGERS - JOB

II. ACTIVITY FORMAT:

A. Tools and Materials

Ledger for each salesman

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

1. Each district manager set up books
    a) Listed each salesman
    b) Number of candy bars taken
    c) Many brought in daily
    d) Help to project future ordering
2. Checks to see that salesmen stayed in own territory

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKE "BOOMERANG" GAME

II. ACTIVITY FORMAT:

A. Tools and Materials

- sabre saw
- shaper
- power drill and kits
- sandpaper
- stain and varnish
- marbles
- 1 x 2 white pine #2

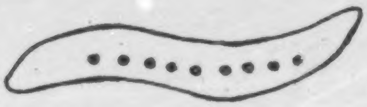
B. Human Aides and Resources

Parents to help supervise use of power tools

C. Procedures for this activity (with helpful hints)

Draw pattern (see attached). Trace pattern on wood and punch holes for drilling. Cut wood with sabre saw. Drill holes. Use shaper to smooth out rough cutting. Sandpaper till smooth. Stain varnish. Put finished product plus 8 marbles into "baggy." (Marbles: 4 red, 4 blue)

BOOMERANG PUZZLE

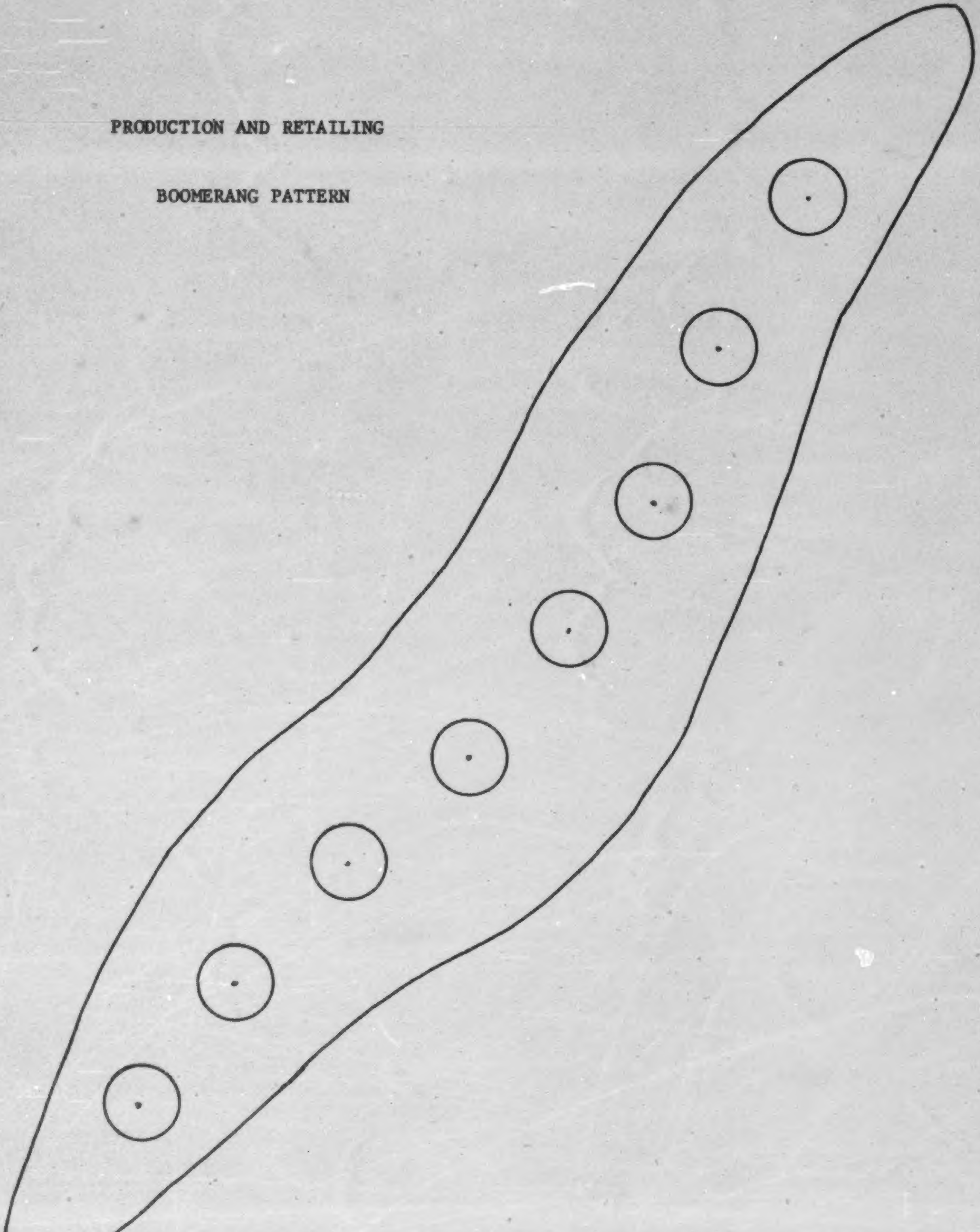


To set up this puzzle, put the marbles in the cups, all of one color on one side and all of the other color on the other side, leaving the center cup vacant.

The purpose of the puzzle is to move or jump the marbles to the opposite sides, one at a time, without moving any piece backwards. Moving or jumping is similar to checkers.

PRODUCTION AND RETAILING

BOOMERANG PATTERN



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. **NAME OF ACTIVITY**

ASSEMBLY LINE - MAKING GEOBOARDS GAME

II. **ACTIVITY FORMAT:**

A. Tools and Materials

hammers
saws
C clamps
sanding blocks
plywood

3/4" 17 finishing nails
4 cans spray paint
3/4" graph paper
masking tape
newspapers (to cover tables for painting)

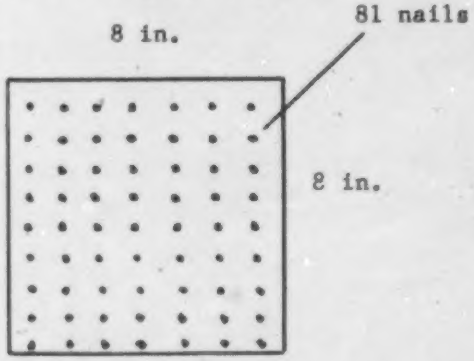
B. Students involved

2 - carpenters
5 - sanders
2 - cutters
2 - tapers
10 - hammerers

2 - remove papers
2 - painters
4 - inspectors
1 - foreman

C. Procedures for this activity (with helpful hints)

1. Cut pieces of plywood into 8 in. square
2. Sand pieces of wood
3. Cut graph paper to fit square of wood
4. Tape graph paper to wood square
5. Hammer nails at intersection of points on graph paper (81 per 8 in. sq.)
6. Remove graph paper
7. Spray paint each geoboard



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

TIC - TAC - TOE GAME

II. ACTIVITY FORMAT:

A. Tools and Materials

saw
ruler
power drill
special drills
sandpaper
marbles
1x6 #2 W.P.

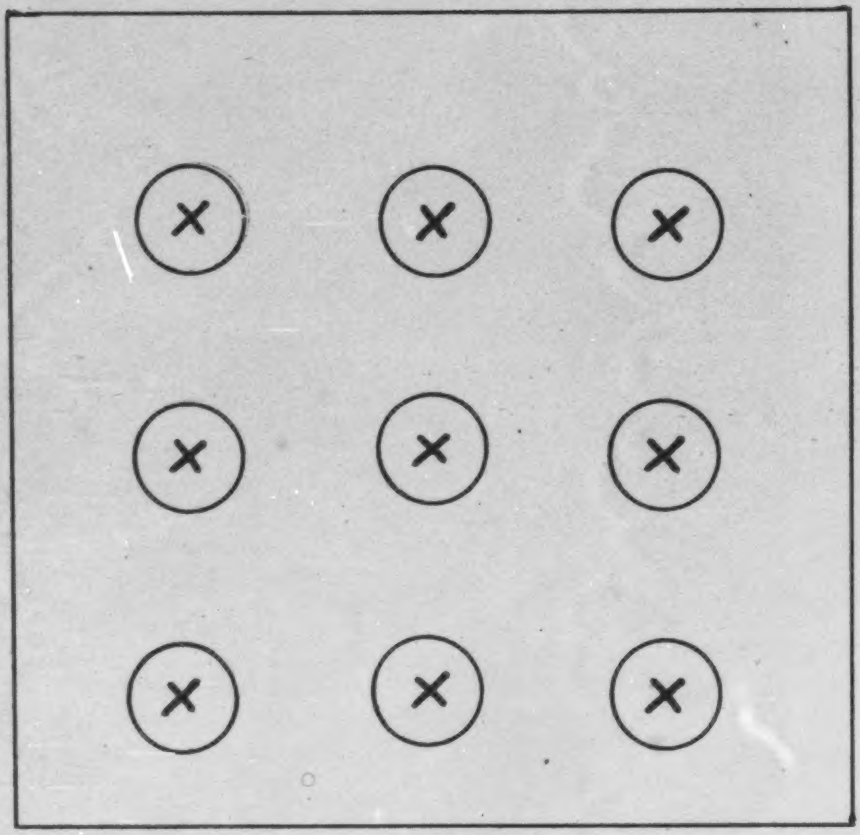
B. Human Aides and Resources

Parents

C. Procedures for this activity (with helpful hints)

Draw a square. Cut board with saw. Trace holes with a pattern. Drill holes. Sand and finish.

TIC - TAC - TOE PATTERN



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PERSONNEL INTERVIEWING BY SPEECH STUDENTS

II. ACTIVITY FORMAT:

A. Tools and Materials

career reference materials
typewriter
ditto masters
mimeograph machine
tape recorder

B. Human Aides and Resources

Speech therapist
Teacher's Aide
Secretary (verbal instructions)

C. Procedures for this activity (with helpful hints)

1. Researched information on job requirements. Worked up job descriptions
2. Decided on information needed for decisions
3. Prepared application blank and interview form (sample attached)
4. After instruction by secretary and teacher's aide, typed masters and ran off application blanks and interview forms
5. Discussed interview techniques and ethics
6. Practiced with tape recorder
7. Explained application and interview j procedures to class
8. Interviewed, discussed results and made job recommendations
9. Formed cadre to continue interviewing as replacements are needed
10. Reviewed tapes of interviews to analyze speech performance

INTERVIEW FORM

1. Do you like math?
2. Are you well organized?
3. Are you good at math?
4. Could you handle money without making mistakes?
5. Are you interested in medicine?
6. Do you get upset when you see blood?
7. Do you feel sorry for people when they are hurt or in trouble?
8. What kind of work do you like best?
9. What are your hobbies?
10. What qualifications do you think an executive should have?

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING BAG HOLDER

II. ACTIVITY FORMAT:

A. Tools and Materials

saw (crosscut)
miter box
drill - 2 bit - counter sink
wire on bolt cutter
jigs

brush - 2 inch varnish
sandpaper
1x2 hardwood
steel wire (clothesline)
varnish
screws - 2 for mounting

B. Students involved:

2 for step 1
1 for step 2
1 for step 3
1 for step 4
2 for step 5
3 for step 6
3 for step 7
4 for step 8

C. Procedures for this activity (with helpful hints)

1. Cut wood to size (6" lengths)
2. Drill holes for wire (according to size wire)
3. Drill holes for mounting
4. Counter sink mounting - holes (could be combined)
5. Cut wire to length 1 @ 30", 1 @ 24", 1 @ 16". Straighten
6. Bend wire over pegs or forms
7. Insert wires in holes
8. Sand
9. Varnish

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MARKETING BAG HOLDER AT FUN FEST OR WHAT HAVE YOU

II. ACTIVITY FORMAT:

A. Tools and Materials

pencils
rulers
color (paint, crayons, magic marker, glue, etc.)
colored paper
poster board
brushes
scissors
chalk

B. Students involved:

No more than two to a poster from copy to finished product

C. Procedures for this activity (with helpful hints)

1. Write copy for poster
2. Layout of poster (block in main elements)
3. Complete drawing
4. Add color or: cut elements from paper
   paste on glue or poster board

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. **NAME OF ACTIVITY**

MAKING FILE BOXES

II. **ACTIVITY FORMAT**:

A. Tools and Materials

boxes
cards
Exacto knives
tape
glue

B. Human Aides and Resources

School secretary
Parents
Custodian

C. Procedures for this activity (with helpful hints)

1. Each was to make or find something to use as a box for cards
2. Cut down kleenex boxes, school boxes, etc.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PAYDAY

II. ACTIVITY FORMAT:

A. Tools and Materials

mimeo machine (duplicator)
pencils
green paper for money
posters for payroll and deduction counters
master (duplicator) for money design
bank (safe, box, etc.)
payroll time voucher

B. Students involved:

1 collector and 1 secretary for each counter involved on payday (wages, insurance, welfare, taxes, personal & group deductions)

C. Procedures for this activity (with helpful hints)

1. Determine days worked
2. Bi-weekly pay distributed
3. Deductions taken out
4. Money kept or banked
5. Classroom materials and bills (electric, heat) paid for

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PAYDAY

II. ACTIVITY FORMAT:

A. Tools and Materials

fake money
signs for payroll personnel
desks for payroll personnel

B. Human Aides and Resources

Royal Oak Payroll personnel

C. Procedures for this activity (with helpful hints)

Invite guest speakers to the classroom to discuss payday procedures, taxes, insurance and other deductions and why they are paid. Brainstorm with the class about amount of wages, bonuses and deductions they would like to employ in their payday. Through interviewing, employ certain classmates as payday personnel. Set up classroom in feasible manner, denoting each station as "wages," "insurance," "deductions," "taxes," etc. Have students compute their gross wages, personnel employees compute deductions from pay, and banker handle change. Proceed to pay out and collect wages and deductions. Use net pay in classroom later to purchase classroom materials, etc.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BAKING PIZZA (for about 8 people)

II. ACTIVITY FORMAT:

A. Tools and Materials

1 envelope dry yeast
2 T. warm water
1 c. boiling water
1 T. shortening
1 t. salt
1/2 t. sugar
3 c. presifted flour
8 oz. shredded pizza cheese

1-1/2 c. drained canned tomatoes
1/2 c. chopped onions
1/2 t. basil
1/2 t. oregano
pepper
1/2 c. spaghetti sauce
1/2 c. sliced pepperoni

B. Procedures for this activity (with helpful hints)

1. Preheat oven to 425 degrees F. Grease pizza pan.
2. Soften yeast in warm water in small bowl. Let stand 5 minutes. Stir till dissolved.
3. Pour boiling water over shortening in bowl. Add salt and sugar. Stir until smooth. Cool to lukewarm. Stir in yeast.
4. Gradually add flour beating well to soft dough. Knead on lightly floured board until smooth. Stretch and pull to fit pan. Let rise in warm place for 15 minutes. Sprinkle on cheese. Top with tomatoes. Sprinkle with onions, basil, oregano and pepper. Spread on spaghetti sauce and pepperoni.
5. Bake in preheated oven for 25 minutes or until crust is golden brown. Cut into wedges.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING RULERS

II. ACTIVITY FORMAT:

A. Tools and Materials

saw - straight edge
standard unit of measure
miter box
drill
wood

sandpaper
paint
varnish
paint brushes
magic marker - fine line

B. Students involved:

9 in each line - 3 lines

C. Procedures for this activity (with helpful hints)

1. Make pattern (sample ruler)
2. Cut wood to length (1 ft. 36 in. etc.)
3. Using template (pattern) encircle marks on raw wood
4. Drill 1/8" hole at 1" mark in center of ruler
5. Lightly sand wood
6. Place numbers by appropriate marks, use fine line magic marker
7. Varnish and hang to dry

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SALES TALKS

II. ACTIVITY FORMAT:

A. Tools and Materials

candy bars we sold

B. Human Aides and Resources

Salesman

C. Procedures for this activity (with helpful hints)

1. Points salesman brought out:
   a) Always apologize for bothering them first
   b) Briefly state your purpose
   c) Would you like to buy two for a $1.00 or one for 50 cents?
   d) Be sure to SMILE
2. Role playing with several students developing their sales talks
3. He bought from each student that tried - told them to always "know your product" - so we sampled the candy - they were more enthusiastic

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. **NAME OF ACTIVITY**

SALES TERRITORY AND SALESMAN

II. **ACTIVITY FORMAT:**

A. Tools and Materials

city maps that show house numbers
map tacks (3 colors)
individual territory log

B. Procedures for this activity (with helpful hints)

1. Three territories were set up
2. Each student lives in their territory
3. Each given own sales log (see attached sheet A)
4. Salesmen each put their own tacks on territory map
    a) Red sales
    b) White order
    c) Black - no sales
5. Took future orders
6. Projected future sales to determine ordering second

SHEET A

SALES TERRITORY SHEET

EMERSON ENTERPRISES

Candy Division

District ______________ Manager ____________________

Sales Representative ____

Territory (street) ____

House Numbers	Date	Sales ($)	No Contact	Order
*Each was listed before given out				
TOTAL				

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

DEVELOP SALES VOCABULARY

II. ACTIVITY FORMAT:

A. Tools and Materials

None

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

The following vocabulary was developed first through group discussion:

Enterprise
Sales log
Territories
Sales representatives
District Managers
Persuasive
Sales projection
Accounts
Graphs
Sales talks

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SILK SCREENING OF PENNANTS, BANNERS AND CUSHIONS

II. ACTIVITY FORMAT:

A. Tools and Materials

- wrapping paper
- 1 x 2" wood
- nails
- saws, hammers
- hinges
- T-square
- thread, needles
- foam
- organdy
- scissors
- yardsticks
- brayers
- ink
- material - felt
- broadcloth
- sewing machine
- screwdrivers

B. Human Aides and Resources

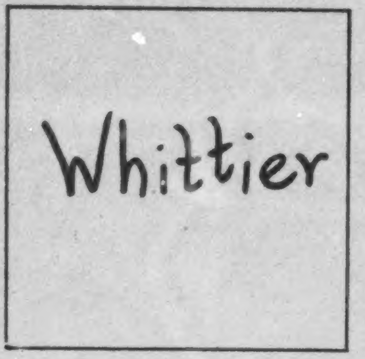
- College students
- Parents
- Art teacher
- Professional artist

C. Procedures for this activity (with helpful hints)

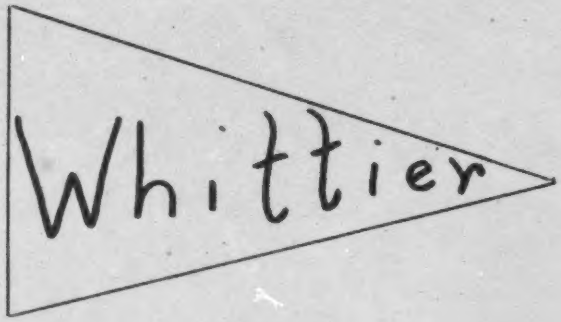
1. Each child submit design, analysis and selection of design.
2. Make frames stretch and attach organdy (this does not work for large screens).
3. Hinge screens to table.
4. Measure and cut fabric, print.
5. Sew cushions together, insert foam, hand stitch fourth edge. Attach streamers to pennants and banners.
6. Package and deliver finished product.
7. Collect money.

PRODUCTION AND RETAILING

SILK SCREENING PATTERNS

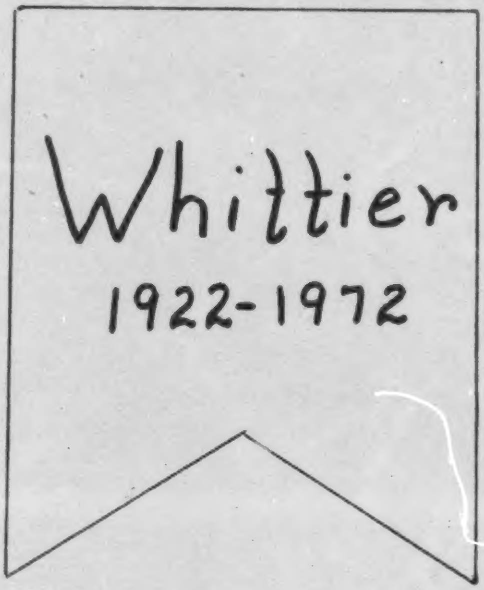


CUSHION 12" 12"



PENNANT

12" 28"


Whittier
1922-1972

BANNER

18" 24"

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A SLIDE-TAPE PRESENTATION FOR PARENTS

II. ACTIVITY FORMAT:

A. Tools and Materials

tape recorder
written material
slides
projector
screen

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Have students view all slides taken from trip to W. T. Grant.
2. Let them each pick a designated number of slides to explain, through writing.
3. Write description of slide.
4. Practice reading description, slowly and distinctly.
5. Tape students' descriptions to go along with slides.
6. Time slides and tape to go together.
7. Present program to parents.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

WORK-STUDY PROGRAM AT W. T. GRANT

II. ACTIVITY FORMAT:

A. Tools and Materials

store
manual from W. T. Grant

B. Human Aides and Resources

Manager of W. T. Grant
Personnel at W. T. Grant
Learning Resource Teacher

C. Procedures for this activity (with helpful hints)

1. Study background information about store including jobs involved and services performed.
2. Invite manager over to the classroom to talk with students about store and jobs.
3. Have students choose what job they would like to have at the store.
4. Make name tags for each student.
5. Go to store, work at designated jobs, with actual worker from store, from 9:00 a.m. to 12:30 p.m.
6. Discuss, once back at school, just what each student did; pros and cons of each job.

UNIT TITLE: UNICEF

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Language Arts	
Sales vocabulary	Identify and use sales terms
Salesmanship	Develop a self-confidence to sell door to door and communicate effectively with the public
Social Science	
Supply and demand	Estimate the number of candy bars territory will buy
Student organization	Organize a territory and elect a good manager

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Class discussion Listen to salesman Role play with him as the buyer	
Keeping own territory log as to sales, orders and project future sales One minute speech as to why a person would be a good manager	

UNIT TITLE: UNICEF (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Math Bookkeeping - keeping money and orders	Devise a method to record sales, orders and money Classify territorial earnings showing money collected, orders, projected sales
Careers People and their job roles: Distribution-sales	Distribute and sell products to clients

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Each salesman was provided with own territory log Managers must keep daily records of their salesmen	
Role play product sales and distribution	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ADVERTISING FOR UNICEF

II. ACTIVITY FORMAT:

A. Tools and Materials

construction paper
large white butcher paper
crayons
magic markers

B. Human Aides and Resources

Material supplied by UNICEF
Tribune reporter

C. Procedures for this activity (with helpful hints)

1. Small posters for halls telling what labels will buy for UNICEF
2. Large (floor to ceiling) thermometers for each type of label (swifts, welch, clark gum, etc.) showing how much has been brought in each day (keep up daily).
3. Lunch was an added activity so we quickly made posters for that.
4. Writeup and picture of lunch in Tribune was excellent.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

COLLECTING LABELS FROM COMMERCIAL PRODUCTS FOR UNICEF FUND

II. ACTIVITY FORMAT:

A. Tools and Materials

boxes for each product to put labels in

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Each student was a member of a label group.
2. As labels were brought in, they were counted and put in individual boxes.
3. Thermometers in hall, indicating progress, were kept up daily.
4. End of project, all labels were boxes, tallied and sent to UNICEF.

LABELS USED:

1. Clark Gum
2. Royal Pudding
3. Swift Premium Franks
4. Welch's Jelly
5. Willy Wonka Candies
6. Cap't Crunch
7. Kool-Aid

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

FORMING A COMPANY AND SETTING UP SIMPLE BOOKKEEPING ACCOUNTS FOR UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

large notebook
notebook paper
rulers

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Set up UNICEF Lunch Co. with officers
   - a) president
   - b) secretary
   - c) treasurer
2. Subsidiary Companies
   - a) Hot Dog Co.
   - b) Sandwich Co.
   - c) Chips Co.
   - d) Milk Co.
   - e) Kool-Aid Co.
   - f) Jello Co.
   - g) Pudding Co.
   - h) Apple Co.
   - i) Candy Co.

   (these companies represent what was served at lunch)
3. Simple accounts were set up. Money for each company was computed by the number of orders, i.e., 200 hot dogs at 15¢ equals $30.00. All expenses were deducted and profits were sent to UNICEF.
4. UNICEF Lunch Co. wrote all checks for each company and kept master books.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SHOPPING FOR UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

shopping list
checks to pay for food
permission slip to go at any time during school hours

B. Human Aides and Resources

Teacher to drive

C. Procedures for this activity (with helpful hints)

1. Each company met and compiled their shopping lists.
2. Teacher took each company on one day to shop.
3. President or treasurer of Lunch Co. had to go to write check each time.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SELECTING MENU AND TAKING ORDERS FOR UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

stencils
3 colors of ditto paper

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Selecting well balanced menu, fair prices for each item, type up stencil and run off on 3 colors (each color represented each of 3 days lunch was served).
2. Collecting orders and money. Each was checked to see if order and money was correct.
3. Compile individual orders for each company for each day.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

COOKING UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

school kitchen
daily menu amounts to prepare

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Set up on wall, sheets with amounts needed, i.e., 40 hot dogs, 10 sandwiches, 15 chips.
2. Jello group was always first because of time needed to set.
3. Pudding group made instant pudding.
4. Sandwich Co. made peanut butter and jelly sandwiches.
5. Make up 3 kinds of Kool-Aid.
6. Apples were washed.
7. Chips were put in individual bags.
8. Hot dogs were cooked _just_ before lunch time.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PRODUCTION LINE FOR UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

long tables (5) covered with white butcher paper in gym by kitchen
lunch tables in gym
waste paper baskets
trays from Kimball

B. Human Aides and Resources

Extra adults to supervise hot dog cooking

C. Procedures for this activity (with helpful hints)

1. Tables set up.
2. Chart for each person's job for the day. (For example: one person would serve one day, act as waitress second day, and third clean-up.)
3. Set up food in order of menu backwards (starting with desserts and ending with hot dogs to keep them hot!!!)
4. Classes were given back their order and brought to line.
5. Order and tray followed down line and food put on.
6. End of line, order was checked and waitress took tray to seat.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CLEAN-UP FOR UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

sponges
pails of water
mop

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. As this was to be like a restaurant, students just left their tables when finished.
2. Food was put away first.
3. Tables were washed and put away.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

TRICK OR TREAT FOR UNICEF

II. ACTIVITY FORMAT:

A. Tools and Materials

UNICEF boxes
money rolls from bank

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. A tentative order was taken for each room as to the number of boxes needed.
2. Obtained boxes from local supplier (Bloomfield Hills Volunteer).
3. Boxes handed out on Halloween (lists with names were kept for each room)
4. Collection of boxes the next few days
5. Counting and rolling up money for banking

III. RESULTS OF THIS ACTIVITY

More money was collected this year than ever before and the class felt it was because of the successful lunch.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: SCIENTIFIC REASONING

GRADE LEVEL: 5-6

GENERAL OVERVIEW: Guiding students to hypothesize about the outcome of science experiments and to be able to check and revise their ideas in terms of results.

TEACHING/LEARNING RESOURCES:

1. Reference Materials:

Show as introduction to unit:
Film - Study Skills - 11 minutes
Film - Simple Demonstrations with Water - 14 minutes

UNIT TITLE: SCIENTIFIC REASONING

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Science Liquids	Be able to follow directions Organize their work Follow a planned procedure Write observations List comparisons Collect materials Draw sketches Discuss causes Discuss results
Language Arts Organization	Be able to organize into groups, to set up experiments, do each experiment and write up the worksheet

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Experiments with liquids	
Experiments with liquids	

UNIT TITLE: SCIENTIFIC REASONING (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers	
People and their job roles:	
Managing	Deduce how the concept of management (planning, organizing and controlling) is an important part of the process of scientific reasoning
Research and Evaluation	List the 6 steps to researching a problem

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Experiments with liquids	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

EXPERIMENTS WITH LIQUIDS

II. ACTIVITY FORMAT:

See attached sheet for experiments to follow this procedure:

Procedures for this activity (with helpful hints)

1. Follow each experiment with this procedure
    - a. State objective
    - b. Hypothesize results
    - c. Plan procedure
    - d. Plan record keeping
    - e. Prepare to make drawings
    - f. Assemble all materials
    - g. Perform experiment
    - h. Discuss observations
    - i. Discuss several possible causes
    - j. Repeat experiment if necessary
    - k. Discuss modification of experiment
    - l. Discuss results
    - m. Discuss relationship to life situations

III. RESULTS OF THIS ACTIVITY (AFTER IMPLEMENTATION)

This is an excellent opportunity to become acquainted with your class in the fall. It is suggested you have students work in pairs or groups of three to five.

References:

Kitchen Physics developed by the Elementary Science Study and published by Webster Division, McGraw Hill Book Company.

Drops and Heaping

Trays
Plastic medicine cups
Bucket of water
Medicine droppers
Waxed paper
Plastic wrap
Aluminum foil
Paint dishes
Small pieces of wood and cork
Paper plates
Refuse bucket
Soapy water solution
Cooking oil w/dropper
Alcohol
Paper towels
Newspapers
Drawing paper

I. 1. What does a drop of liquid look like? Place a few drops of water on wax paper and observe.

2. How small a drop can you make? How does a tiny drop differ in appearance from a "blob" made of several regular-size drops?

3. Can two small drops be made to form a single larger drop on the wax paper?

4. Do water drops leave "tracks" as they move across the wax paper?

5. How does newsprint look when observed through a drop of water resting on wax paper? On plastic wrap?

6. Do water drops on wax paper differ from drops on plastic, or aluminum foil, or paper toweling?

7. Do drops of alcohol or oil or soapy water differ from drops of tap water when placed on wax paper? Draw pictures of each; be sure to label your pictures.

8. How does newsprint look when observed through a drop of soapy water? Compare the soapy water drop with the drop of plain water.

II. How much water can you put in a paint dish? Fill a plastic cup with water without letting it overflow. Place the dry cup on a paper towel so that you will notice if it overflows later. HOW MANY DROPS OF WATER DO YOU THINK YOU CAN ADD TO THE WATER IN THE CUP BEFORE IT WILL OVERFLOW? Begin adding drops of water to the cup with a medicine dropper. Count the drops that you add until the cup overflows. Observe the water surface as you add the drops. DRAW A PICTURE OF THE CUP WITH A LOT OF WATER IN IT.

III. 1. Can you get an oil drop to stay on top of a water pool? Can you get a water drop to stay on top of an oil pool?

2. If an oil drop, water drop, and soapy-water drop are rolled down a slanted surface (paper plate) which wins the race? What happens if you run the race a second time using the same tracks?
3. What happens to a small sliver of aluminum foil that has been placed on the top of the "heaped-up" water in a plastic cup? Try a small drop of oil the same way.
4. What happens if you place a small piece of cork or wood on top of the heaped-up water? Place a piece of wood near the edge of the water and observe.

Tugs-of-War and the Skin-Like-Effect

Lightweight thread
Liquid soap
Medicine droppers
Soap solutions
Shallow dish 6" in diam. or more
Flat tray
8 or 9 inch aluminum pie plate
Plastic cups
Food coloring
Talcum powder
Cooking oil
Paper clips

IV. Soap in a floating loop of thread.
Make a loop out of a piece of lightweight thread about a foot long. Float the loop on the surface of water in a shallow paint dish. Be sure the dish is clean and free of soap contamination. Carefully place a single drop of soap solution inside the loop on the water surface. NOTICE THE EFFECT ON THE LOOP OF THREAD. If at first you do not succeed with this one, try, try again. It is worth the trouble.

REPEAT WITH VARIATIONS:

1. What would happen if the soap solution drop was added to the water outside the loop. Try this with a fresh dish of water.
2. Would a drop of plain water have the same effect as the drop of soap solution?
3. After you have added a drop of soap solution to the water, is there any additional effect from adding other drops of soap solution?

V. Alcohol versus water.
Place a thin layer of colored water on a shallow paint dish. Spread the layer of colored water as thinly as possible across the dish. WHAT WILL HAPPEN WHEN A DROP OF ALCOHOL IS ADDED TO THE WATER? Place the alcohol on the water and observe the effect.

VI. The talcum powder Tug-of-War.
Sprinkle talcum powder on the surface of water in a pie plate. When the water is motionless, PLACE A SINGLE DROP OF SOAP SOLUTION NEAR THE CENTER OF THE POWDERED WATER SURFACE.

REPEAT WITH VARIATIONS

1. Start over with fresh water and talcum powder. Place single drop of plain water near the center and observe. Compare this effect with that of the soap-water drop.
2. Place a drop of soap water near the edge of the dish.
3. Try the same thing using alcohol instead of soap-water.

VII. A Delayed Tug-of-War

Estimate a 1/2 teaspoon of cooking oil and place it near the center of a shallow dish of colored water. WHAT DO YOU THINK WILL HAPPEN IF YOU PLACE A DROP OF SOAP ON TOP OF THE OIL?...IF YOU THEN TOUCH THE WATER NEAR ONE SIDE OF THE OIL WITH A DROP OF SOAP SOLUTION?

Repeat the process using alcohol instead of soap solution.

Wait for the effect! Remember, this is a delayed tug-of-war.

VIII. Floating on "Skin"

Partially fill a container with water. A large surface (pie plate) with shallow water is best. Be sure the water is free of soap. TRY TO FLOAT A PAPER CLIP ON THE WATER SURFACE. Practice until you are able to do this. You may want to fashion a tool to help you do this. Use a second paper clip to make this tool.

When you have a paper clip floating, OBSERVE THE WATER SURFACE NEAR THE PAPER CLIP. Add a drop of plain water to the surface near the clip to see if it has any effect. Add a drop of soap solution in the same way. Note the effect of soap.

Float a toothpick on water. See if there is any effect on it when soap is added to the water.

The Rise of Water in Blotter Strips

(12-16" blotter strips
(1/2", 1", 2", 1 1/2" wide
Shallow dish for ends of blotter
Masking tape
Shallow dish for ends of strips
Support for blotter strips

IX. The Rise of Water in Blotter Strips

Arrange long (12 to 18 inches) blotter strips of various widths (1/2 in., 1 in., 2 in., etc.) in an upright position so that the lower ends may be submerged in a tray of colored water. Observe the rise of liquid in the blotter strips over a 24-hour period.

Repeat the above activity, but this time cover the new blotter strips with plastic-wrap so that water cannot evaporate from the blotter strips. Observe the climbing water over a 24-hour period.

STUDENT WORK SHEET

Experiment #_______ Name______________________________Date_______________

Others in group

1.
2.
3.
4.
5.

1. What are you trying to find out?

2. What do you think will happen?

3. Number and answer or diagram all the questions in your experiment.

4. Have you ever noticed any of the above things happening in life around you at home and other areas where you work or play?

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT PLANSHEET

TITLE: SEASONAL PROJECTS

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this Seasonal Projects section, the following integrated teaching units have been combined and/or presented as a tentative guide for ideas in, application to or relevance to the upper elementary classroom.

TEACHING/LEARNING RESOURCES:

1. Reference Materials:

Books:
McCall's Book of Paper, Wood and Paint Crafts

Magazines:
Instructor's Magazine - December, 1972
McCall's Magazine - December, 1972

Films:
Tools and Their Uses - Instructional Materials Center

2. Field Trips:

Bavarian Village - Frankenmuth, Michigan
Birmingham Lumber
Fabric Center
Frank's Trims
J. C. Penney
John R. Lumber
Lawson Lumber

3. Human Resources:

Macomb Community College students

4. Activities Listed:

Brainstorming on format of unit activities (what to do, etc.)
Construction of Keyboards
Cookie-type decorations
Ball ornaments

4. Activities Listed: (continued)

- Felt decorations
- Paint by number
- Popcorn and cranberry strings
- Macaroni decorations
- Make a tie
- Make an apron
- Do creative stitchery
- Make a picture frame
- Design a picture
- Sale of decorations
- Role playing:
  - Purchasing agent, semi-skilled worker constructing decorations
  - Banker - cost accountant - paying bills for materials, save profit for contribution to school
  - Quality control - save number stubs, keep track of which children selling how many decorations
- Writing reports on history of Christmas decorations
- Construct charts on the history of tools
- Discussions on the history of Christmas decorations

UNIT TITLE: SEASONAL PROJECTS

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Sciences	
Economics	Compute profit and loss in selling Devise a means to raise money as a contribution to school library's purchase of carpeting
History	Recognize and identify old and new Christmas decorations Relate the history of old Christmas ornaments and decorations
Sociology	Recognize cooperation as a desirable quality in production
Science	
Heat	Discover the best method of cooking ingredients in recipe
Plants	Identify organic raw materials used in creative stitchery (popcorn, macaroni, etc.)

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Selling ties, aprons, creative stitchery, picture frames Write a report on or discuss the history of Christmas decorations Construct a chart illustrating early man's tools Write a report on early man's tools	
Baking pizza, cookies Creative stitchery	

UNIT TITLE: **SEASONAL PROJECTS** (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Math	
Measurement	Measure ingredients in recipes Measure length and width of wood and cloth with a ruler Space hooks and pegs on finished keyboards
Quantity	Compute amount of materials needed for production of Christmas ornaments
Time	Compute time in obtaining materials for unit
Distance	Compute distance involved in obtaining materials for unit
Money	Compute cost of materials to be used in unit
Language Arts	
Writing	Write a thank-you letter to guest speakers - answer questions on a worksheet for making picture frames - identify old and new Christmas decorations
Research	Discover information on the history of tools and Christmas decorations
Speaking	Relate the relevance of a field trip to the unit under study
Sequence	Identify products chronologically

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Baking cookies, pizza Making picture frames and keyboards Making keyboards Plan for making Christmas ornaments and decorations Plan for making ties, aprons, creative stitchery, picture frames Plan for making ties, aprons, creative stitchery, picture frames	
Making picture frames Write a report on old and new Christmas decorations Write a report on the history of tools or Christmas decorations	

UNIT TITLE: SEASONAL PROJECTS (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Art	
Designing	Devise a design for unit products
Decorating	Devise a decoration for unit products
Careers	
People and their job roles:	
Research	Prepare steps for producing, changing raw materials to finished product
Purchasing	Estimate the cost of needed materials for unit project
Producing	Differentiate skilled, semi-skilled and unskilled jobs in unit activity Manipulate tools to produce products Construct a product by combing materials Identify raw materials used in producing a unit product Recognize the conditions needed to store and preserve raw materials needed for unit activities Identify personal feeling of accomplishment upon completion of product Differentiate personal feelings of working individually and on assembly line

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Making Christmas decorations Baking cookies Making felt decorations Making popcorn and cranberry strings Making macaroni decorations Doing creative stitchery Designing decorations	
Brainstorming Role playing: purchasing agent Constructing keyboards Baking pizza, cookies Making Christmas decorations, ties, aprons, popcorn and cranberry strings, felt decorations, macaroni decorations Do creative stitchery Paint by number Making picture frames	

UNIT TITLE: SEASONAL PROJECTS (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers (continued)	
Managing	Manipulate workers and materials in an efficient manner
Retailing	Predict cost of packaging materials Suggest places and prices for selling finished products

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Role playing: quality control manager, foreman Selling unit products	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

COOKIE TYPE DECORATIONS

II. ACTIVITY FORMAT:

A. Tools and Materials

- 4 cups flour
- 1 cup salt
- 1 7/8 cup water
- Ornament hooks
- Rolling pins
- Cookie cutters
- Extra flour for flouring boards and hands
- Acrylic spray
- Plastic wrap
- Paint
- Mixing bowls
- Spoons
- Cookie sheets
- Measuring cups

B. Procedures for this activity (with helpful hints)

Mix together: flour, salt, water. (Note: for smaller portions, use these proportions - 1/2 cup flour, 1/8 cup salt, 1/4 cup water.) Finish mixing with your hands if necessary. Knead dough on a generously floured board until it's very smooth and has a good consistency with which to work (this will become easier to determine the more you work with the dough; it is easier to knead flour into dough that is too moist than it is to knead water into dough that is too dry). Be sure to keep unused portions covered with plastic wrap. If dough becomes too sticky before you are through with it, knead more flour into it. **Put ornament hooks in before baking. Roll out, cut figures with cookie cutters. Place figures on cookie sheet and bake at oven set at 275 - 300 degrees (had mothers take them home to bake). Bake about 3 hours. Never leave figures unbaked for more than 2 hours. Cool. Paint. Spray.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CHRISTMAS DECORATIONS

II. ACTIVITY FORMAT:

A. Tools and Materials

Rulers	Paper cutter
Scissors	Dremel saw or coping saw
Stapler	

Oak tag or cardboard rolls for rings, pencil for marking measurements, colored aluminum foil for ring covers. Alligator or plastic bags to bag finished product. Construction paper lid for decoration package.

B. Procedures for this activity (with helpful hints)

1. a. Cut with paper cutter or other cutting instrument 1 1/2" roll from cardboard rolls or
   b. Measure and cut 3 1/4" by 6" rectangles from oak tag, staple into 3 1/4" by 5 1/2" circles.
2. Cover rolls with aluminum foil (inside and out), staple 12 rolls into triangle of 10 with base of 2 rolls, decorate inside of or outside of rolls with minature decorations or cotton or construction paper.
3. Package
4. Staple shut with construction paper top
5. Label

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CREATIVE STITCHERY

II. ACTIVITY FORMAT:

A. Tools and Materials

- Burlap
- Yarn
- Needles

B. Procedures for this activity (with helpful hints)

1. With help of art teacher, children designed a picture on paper.
2. They cut out their picture and traced it with pencil on burlap.
3. Embroider with various stitches around picture. Use different colored yarns.
   *Mothers taught special stitches to the children: French knot, running stitch, chain stitch, etc.
4. Hem edges on machine.
5. Cut dowels of wood and insert at top to hang up.
6. Add braided yarn tie at top.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

TIE MAKING

II. ACTIVITY FORMAT:

A. Tools and Materials

Tie making kit with all materials in it
Sewing machines
Irons
Ironing Boards

B. Procedures for this activity (with helpful hints)

Follow the instructions (read and interpreted by the mother assistant), that are included in the tie kit. These kits are available at most fabric stores.

Iron the finished product. Fold and wrap.

(Kits purchased at Gwynn's Fabric Shop, Merrill Rd.,
Birmingham, Michigan)

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING AN APRON

II. ACTIVITY FORMAT:

A. Tools and Materials

1 yard of cloth	Sewing machine
Needles	Thread
Iron	Ironing board

B. Procedures for this activity (with helpful hints)

1. Cut large pattern out of newspaper
2. Have children pin pattern on cloth and cut it out
3. Use machine to turn under hem and to add tie at the top
4. Add pockets if desired
5. Iron the apron
6. Fold and wrap

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CONSTRUCTION OF KEYBOARDS (OR MITTEN TREES)
(See following sheet)

II. ACTIVITY FORMAT:

A. Tools and Materials

- Wood stain
- Clip clothespins
- Cup hooks
- White glue
- Wood putty
- Turpentine
- Soft rags
- Dowel rod
- Black spray paint
- Sheet of 4' x 8' plywood
- Miter box and saw
- Brace and bit
- Hammers
- Nails
- 9 paint brushes
- Cardboard box for "spray paint booth"
- Fine and medium sandpaper
- Colored enamel

B. Human Aides and Resources

Student - Macomb Community College

C. Procedures for this activity (with helpful hints)

Have plywood pre-cut to 8" x 10" size
Use a miter box to cut pegs to correct length
Apply stain with wide brush and wipe off with soft cloth
Have plenty of turpentine!

PEG KEY BOARDS

2 brushes

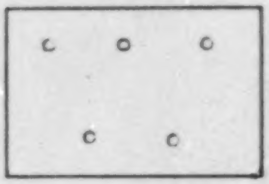
Boards

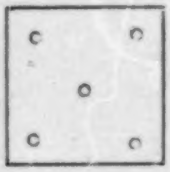
Place block underneath.
Drill hole completely through board in five places

Pegs

(Use five pieces)
Measure 2" for each peg.
Cut carefully where you have marked.
Dip pegs in stain (end you are holding onto will be glued in hole so does not have to be stained).

Glue pegs into holes with white glue.
Fill area around hole with wood putty.
Wipe all sawdust from board.
Stain board with wood stain.





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6 brushes

PIANO KEY BOARDS

Boards

Wipe sawdust from board.
Discuss proper painting technique with enamel.
Spread out newspaper.
Paint board white.
Clean brushes!

Clothespin Keys

Tie seven pins to strings.
Hang inside carton
Discuss techniques for spray painting.
Spray pins black.

Assembling

Mark location for keys (measured real keyboard)
Take clothespins apart
Drill hole in one-half of pin.
Nail through hole into board.
Re-assemble clothespin.

---

1 brush

CUPHOOK KEY BOARDS

Wipe sawdust from board.
Discuss painting technique with enamel.
Spread out newspaper.
Paint board a light color.
Paint design with small brushes and colored enamel.
Screw in cupbooks.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MACARONI DECORATIONS

II. ACTIVITY FORMAT:

A. Tools and Materials

Tag board
Paint
Scissors
Macaroni
Glue
Acrylic Spray

B. Procedures for this activity (with helpful hints)

1. Cut a Christmas shape out of tag board. **
2. Glue macaroni on shape.
3. Paint
4. Spray

**Large figures could be made for door decorations

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PICTURE FRAMES AND PICTURES

II. ACTIVITY FORMAT:

A. Tools and Materials

Wood
Glue
Miter box
Scissors
Furniture stain
Saws
Poster board
Rulers

B. Procedures for this activity (with helpful hints)

1. Measure amount of wood for a frame (perimeter)
2. Cut wood into desired lengths
3. Miter the corners
4. Cut poster board to desired length and width
5. Stain the wood
6. Glue wood onto poster board
7. Cut pieces of felt to form the picture
8. Glue felt

(Stain the picture frame wood before glueing)

See following sheet

HANDS ON ACTIVITY

PICTURE FRAMES

Name______________________Date______________PROJECT LET ACTIVITY

1. Write the name of the students in your group______________________________

____

2. Write the names of the adults that helped you______________________________

____

3. The distance around a rectangle, square, or triangle is called its perimeter.

Show 2 different ways to find the perimeter of your picture frame.

(1)	(2)

4. How long is the piece of wood you need for your picture frame?______________

5. How long is the piece of wood that was purchased?______________________

6. How many picture frames can we cut from this piece of wood?_______________

7. List the materials you used for this project______________________________

____

8. What tools did you use for this project?____________________________

____

9. What tool is used to cut the corners for the picture frame?______________

10. What kind of saw is used with a miter box?__________________________

11. What time did you start this activity?______________________________

12. What time did you stop working on this activity?______________________

13. How much time did you spend on this activity?_________________________

14. If you were doing this activity (making picture frames) on an assembly line, what kind of jobs would there be?

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BALL ORNAMENTS

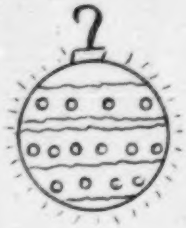
II. ACTIVITY FORMAT:

A. Tools and Materials

- Satin balls (2 colors)
- Rickrack scraps
- Lace scraps
- Felt scraps
- Ribbon scraps
- Ornament hooks
- Glue
- Beads
- Sequins
- Pins
- Material scraps
- Cups for items
- Scissors

B. Procedures for this activity (with helpful hints)

1. Organize materials for small groups
2. Work at creating own design on ball



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

FELT DECORATIONS (SANTA MOBILE)

II. ACTIVITY FORMAT:

A. Tools and Materials

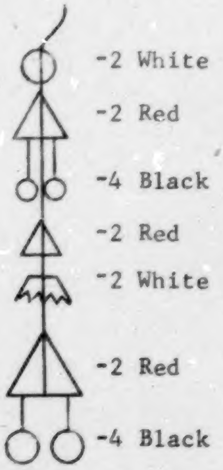
Black, red, white felt
Red string
Scissors
Glue

B. Procedures for this activity (with helpful hints)

1. Demonstrate making of "Santa"
2. Cut according to diagram
3. Begin construction with one piece of each, run string from top tc bottom, leaving about 2 inches of string at top. Glue string to material. Insert eyes and feet (double) at this time.
4. Cover each piece with second piece.

III. RESULTS OF THIS ACTIVITY (after implementation)

The finished item is a mobile that can decorate a tree or window for years to come. This is a good example of a homemade item. Project takes about 45 minutes.



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PAINT BY NUMBER

II. ACTIVITY FORMAT:

A. Tools and Materials

Paint by number kit - Frank's Trims
Extra brushes
Acrylic spray or hair spray

B. Procedures for this activity (with helpful hints)

1. Explanation and demonstration of painting small areas and following directions for the colors.
2. Spray with acrylic to prevent paint from chipping.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

POPCORN AND CRANBERRY STRINGS

II. ACTIVITY FORMAT:

A. Tools and Materials

Popcorn
String
Popcorn poppers
Cranberries
Needles

B. Procedures for this activity (with helpful hints)

1. Pop corn
2. String chains of popcorn
3. String chains of cranberries
4. String chains of alternate popcorn and cranberries

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: THEATRE

GRADE LEVEL: 5-6

GENERAL OVERVIEW: This unit encompasses a musical production, prop construction and stage make-up.

TEACHING/LEARNING RESOURCES:

1. Reference materials:

   Books: Concepts for Social Science Behavior - Grade 6

   Movie: My Fair Lady

   Record: My Fair Lady - theme

2. Field Trips:

   See movie My Fair Lady

3. Human Resources:

   Musical composer
   Movie Director or Play Director
   Stage Director
   Singer
   Dancer

4. Activities:

   Rehearsal for play
   Stage props constructed
   Play performance
   Stage make-up

UNIT TITLE: THEATER

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Sciences	
World problems	Recognize and cite evidence for wars on our planet Recognize and cite evidence for the inability of certain groups of people to live in harmony with other peoples
Social status	Examine the value of higher status in our society
Science	
Weather	Identify the unpleasant variables of weather Recognize and cite evidence for the need of variables in weather on our planet
Language Arts	
Satire	Apply satire to daily or accepted situations or events
Music	
	Apply an original paly or poem to a familiar song or melody
Art	
Set decoration	Devise an appropriate stage prop for a theatrical performance

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Write words to play	
Write words to play	
Write words to play	
Write words to play	
Set play to music	
Make a rocket	

UNIT TITLE:

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Careers People and their job roles: Production of music and sets in the theater	Apply the words of a play to existing music (musical arrangers) Construct wooden props for the theatrical production

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Set a play to music	
Make wooden rocket	
Write a play	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

STAGE MAKE-UP DEMONSTRATION

II. ACTIVITY FORMAT:

A. Tools and Materials

Volunteer
Theater Make-up

B. Human Aides and Resources

Student from Macomb Community College

C. Procedures for this activity (with helpful hints)

1. We picked the main elf to be made up.
2. Talked about importance of using proper base.
3. Stage uses a grease paint, but told us how to use cosmetics.
4. Demonstrator showed us how not to have make-up patchy - how to make a person old or young, and highlight features.
5. Must be able to see features in last row.

III. RESULTS OF THIS ACTIVITY (AFTER IMPLEMENTATION)

Children were very interested and really listened. All were sorry afterwards that they did not volunteer.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

APPLYING OWN MAKE-UP FOR PLAY

II. ACTIVITY FORMAT

A. Tools and Materials

Cold cream for base
All kinds of cosmetics

B. Procedures for this activity (with helpful hints)

1. Each applied own make-up as closely as they could to earlier demonstration.

2. Floodlights must be used in play in order to make this effective.

III. RESULTS OF THIS ACTIVITY (AFTER IMPLEMENTATION):

Everyone enjoyed doing this - even the boy that spoke one line was excited about his putting on make-up. I think this really brought everyone together.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MUSICAL PRODUCTION

II. ACTIVITY FORMAT:

A. Tools and Materials

T-shirts

B. Human Aides and Resources

Singer
Musical composer
Play director

C. Procedures for this activity (with helpful hints)

1. Write words to songs.
2. Practice singing.
3. Go over movements associated with songs.
4. Dress rehearsal.
5. Final performance.

See following sheets for play.
T-shirts may be sprayed with paint to identify groups of children in play.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ROCKET PROP

II. ACTIVITY FORMAT:

A. Tools and Materials

Tool panel compliment
10 pieces 3/4" x 1" x 6' firing strips
50 1" nails
25 1¼" nails

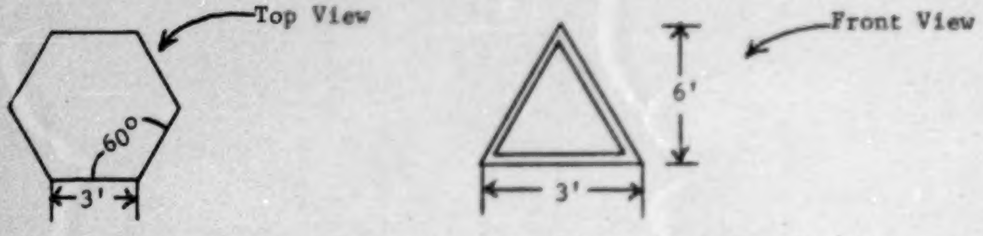
12" x 4' corrugated cardboard
Scrap ¼" plywood
4 1" paint brushes
Tempra paint
Kraft paper (30', 3' wide)

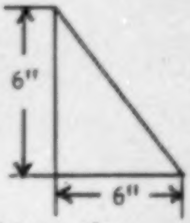
B. Human Aides and Resources

College student or carpenter

C. Procedures for this activity (with helpful hints)

1. Construct a frame appropriate to the following sketch using 3/4" x 1" x 6' firing strips.

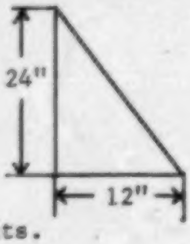




2. Brace all corners with 6" triangles of ¼" plywood.

3. Cover 5 of the 6 sides with Kraft paper; staple this to the firing strips. One side should be left open to enter the rocket.

4. Construct 3 fins out of cardboard and fasten to sides of rocket.



5. Paint appropriately using tempra paints.

MUSICAL - "At This Rate It May Soon Be Too Late"

Tune: "Hernando Hideaway"

We've just arrived from outer space, to gaze upon the human race.

We've landed here so we can see, what's happened to humanity, you see.

Your escapades have brought us here to see your sorry state, radioactivity should not be your fate.

In to our rocket ships we've jumped, we hope we're not too late, we're not too late.

We've landed here from far away. We look quite odd to you this day.

So lend an ear and don't dismay, the truth you cannot hide away, away.

****

Oh, we're feeling mightly blue, cause the world is in a stew.

They're rioting in Africa, Bump Bump Bump Bump Bump Bump Bump

They're starving in Span, Bump Bump Bump Bump Bump Bump Bump

There's hurricanes in Florida, Bump Bump Bump Bump Bump Bump Bump

And Texas needs rain, Bump Bump Bump Bump Bump Bump Bump

The whole world is festering with unhappy souls, the French hate the German, the Germans hate the Poles, Italians hate the Yugoslavs, South Africans hate the Dutch, and no one likes anybody very much, Bump Bump Bump Bump Bump Bump Bump

But we can be thankful, and tranquil, and proud for man's been endowed with a mushroom shaped cloud, and we know for certain that some lucky day, someone will set the spark off, and they will all be blown away, Bump Bump Bump Bump Bump Bump

****

(Tune: Take Me Out To The Ball Game)

It seems that their future is not too secure, at least a million conflicts they will have to endure.

With Mao in China, and Cuba's Castro too, satellites in orbit and in Asia there's flu, achoo.

A country can develop a war, a person can develop a cold, cold war.

Take us out to the arms race, Take us out to the war.

You've bought some missiles and submarines, you'll blow the whole world to smithereens.

We will root, root, root, for the good guys, if they don't win it's a shame.

For it's one, two, third war, you're out, at the cold war game. Achoo.

****

Oh, what's the matter Mr. Jones, what's troubling Mr. Lee
They're too identical to have their own identity.
The Joneses, the Joneses, you've got to keep up with the Joneses.
Oh, Mr. Jones just bought a car, he's happy as can be. And now guess who just
bought a car, his neighbor Mr. Lee.
The Joneses, the Joneses, you've got to keep up with the Joneses.
They're stuck like everybody else in their society. They're stuck with each other,
stuck with each other, stuck with each other, ca ca ca you see.

****

Click, click, I'm a wheel, Click, click I'm a wheel. Click, round and round I'm
going, click precision always showing.
A gear is what I am, I do the work of man. A gear is what I am, I do the work of man.
I'm just a little lever, and I may not be so clever, but I do the country's work
Work piston work. Work piston work. Don't stop or jerk. Don't stop or jerk.
Piston work, piston work, piston work WORK.

****

So go home to the Joneses, the Goldbergs, and the Browns, let them know what it's
all about
If you're feeling dejected go out and make it over, hurry up, hurry up you must go
That's the answer, That's the answer, try to make up a new set of rules.
So go home to the Joneses, the Goldbergs, and the Browns, let them know what it's
all about.
You must shake them, and wake them, you've simply got to make them face the fact, at
this rate it may soon be too late. Bump Bump Bump Bump Bump Bump Bump
At this rate, it may soon be too late.

THE END

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: WRITING MUSIC

GRADE LEVEL: 5-6

GENERAL OVERVIEW: A cooperative unit between the classroom teacher and the special teachers in teaching the children to compose their own music and lyrics.

TEACHING/LEARNING RESOURCES:

1. **Reference Materials:**

   Books:
   Tall Tale America
   (Many tall tale books on American folk heroes)

   Filmstrip and Record Sets:
   Songs of the Revolution
   Songs of the Old South
   Songs of the Civil War
   Songs of the Railroad

2. **Human Resources:**

   Music teacher
   Speech correctionists

3. **Activities Listed:**

   Composing Folk Songs
   Writing Lyrics for Folk Songs

UNIT TITLE: WRITING MUSIC

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Social Sciences	
American History	Of a list of 10 historical figures in which only 5 are American folk heroes, identify the 5 American folk heroes
	Of a list of 10 historical events in which only 5 are American historical events, identify the 5 American historical events
	Describe the character of one American folk hero
	Infer the importance of one American historical event
Language Arts	
Reading Listening	Relate stories and songs presented in class in preparing his own story and song
Writing	Compose an original tall tale
Forms of Tales	Of a list of four kinds of tales (epic, fairy, tall and folk) choose the tall tale as the one which exaggerates human achievement

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Writing lyrics for folk songs	
Writing lyrics for folk songs	

UNIT TITLE: WRITING MUSIC (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	As a result of this unit, each child will be able to:
Music	
Listening	Recognize a folk song when heard
Composing	Compose a musical stanza
Arranging	Apply the lyrics to music
Careers	
People and their job roles:	
Research	Gather data on American history or American historical figures
Producing	Use data gathered on American history or American historical events in composing a song

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Composing music for folk songs	
Writing lyrics for folk songs Composing music for folk songs Setting lyrics to music	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

WRITING LYRICS FOR A FOLK SONG

II. ACTIVITY FORMAT:

A. Tools and Materials

Paper
Pencil

B. Human Aides and Resources

Speech correctionist
Music teacher

C. Procedures for this activity (with helpful hints)

Have pupils write, in poem form (to be set to music), an original folk tale about an American hero or event (factual or fictitious) after listening to and/or reading about them in various books, and listening to and watching filmstrip and record set on American historical folk songs.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

COMPOSING FOLK SONGS

II. ACTIVITY FORMAT:

A. Tools and Materials

Staff paper
Pencils

B. Human Aides and Resources

Speech correctionist
Music teacher

C. Procedures for this activity (with helpful hints)

1. Students are to decide upon a time signature
2. They will write a stanza of music
3. Incorporate lyrics from previous activity and music written from this activity

ACTIVITIES - GRADES 5-6

	UNIT NO.
Anthropological Observations	1
Archaeological Dig	1
Bird Feeders (Making)	5
Books (Assembling-line Production of Hardbound)	7
Books (Individual Construction of Hardbound)	7
Book (Making)	7
Books (Making)	7
Books (Making)	7
Boxes (Making Boxes to Show Various Soil Practices)	5
Bread (Home-Made)	8
Bread Making From Starter	8
Bricks (Making)	5
Bulbs (Planting)	5
Butter Making	8
Campaign Buttons (Mass Producing Using Assembly Line Techniques)	11
Candle (Dipping)	3
Candle-Making (Molding)	3
Candle-Making (Sand Casting)	3
Christmas (Apron Making)	14
Christmas (Ball Ornaments)	14
Christmas (Construction of Keyboards)	14
Christmas (Cookie Decorations)	14
Christmas (Creative Stitchery)	14
Christmas (Decorations)	14
Christmas (Felt Decorations - Santa Mobile)	14
Christmas (Macaroni Decorations)	14
Christmas (Paint by Number Kit)	14
Christmas (Popcorn and Cranberry Strings)	14
Christmas (Tie Making)	14
Court Room Scene (Role-Playing)	11
Crystals (Growing)	4
Election Ballots	11
Election (Brainstorming)	11
Election (Classroom)	11
Election Registration	11
Electrical Occupations (Bulletin Board of)	10
Electromagnet Construction	10
Embossing with Aluminum Foil	3
Family (The Making of)	1
Fossils (Making)	4
Fossils (Making Examples of)	1

ACTIVITIES - GRADES 5-6

	UNIT NO.
Hearts (Dissect)	9
Kachina Dolls (Making)	1
Liquids (Experiments with)	13
Lungs (Making a Model)	9
Mummies (Making)	1
Mural - Painting Murals of Development of Tools	1
Music (Writing Folk Songs)	16
Music (Writing of)	16
Occupations (Reports on)	1
Pancake Supper	8 & 12
Paper (Making)	7
Paper (Note, Cards, Envelopes)	7
Paper (Making from Papyrus)	7
Paper (Making from Pulp)	7
Paper (Making from Rabbit Pelts)	7
Pizza (Baking)	8 & 12
Pizza Lunch (A)	8 & 12
Planting and Growing Seeds	5
Planter Boxes (Construction of)	5
Plays (Writing of Original)	6
Popcorn Balls (Making)	8
Pre-Historic Working Model Tools (Making)	1
Printing (Relief)	3
Puppets (Make)	6
Production and Retailing - Apple Pie	12
Production and Retailing - Application Blank	12
Production and Retailing - Automobile Mass Production	12
Production and Retailing - Booklets	12
Production and Retailing - Booklets (Assembly Line)	12
Production and Retailing - Bulletin Board of Jobs	12
Production and Retailing - Constructing Wooden Book Holders	12
Production and Retailing - Constructing Wooden Book Shelves	12
Production and Retailing - District Manager	12
Production and Retailing - District Manager's Job	12
Production and Retailing - Game, Boomerang	12
Production and Retailing - Game, Boomerang Pattern	12
Production and Retailing - Game - Geoboards	12
Production and Retailing - Game, Tic-Tac-Toe	12
Production and Retailing - Game, Tic-Tac-Toe Pattern	12
Production and Retailing - Interviewing	12
Production and Retailing - Interview Form	12
Production and Retailing - Making Bag Holder	12
Production and Retailing - Marketing Bag Holder	12

ACTIVITIES - GRADES 5-6

	UNIT NO.
Production and Retailing - Making File Boxes	12
Production and Retailing - Payday	12
Production and Retailing - Payday	12
Production and Retailing - Pizza	12
Production and Retailing - Rulers	12
Production and Retailing - Sales Talks	12
Production and Retailing - Sales Territory	12
Production and Retailing - Sales Territory Sheet	12
Production and Retailing - Sales Vocabulary	12
Production and Retailing - Silk Screening Directions	12
Production and Retailing - Silk Screening Pattern	12
Production and Retailing - Slide Presentation	12
Production and Retailing - Work-Study Program at Grant's	12
Refinishing Wooden Top Desks	5
Research Reports (Mountains, Earthquakes, Volcanoes, Glaciers, Geysers, and Faults)	4
Rock Collection	4
Rock (Making a Sedimentary - Sandstone)	4
Rolls (Baking)	8 & 12
Sea Lab (Building A)	4
Sewing Owl Case for Glasses	8
Shields (Making and Designing)	3
Soap (Making)	3
Spirometer (Making A)	9
Stage (Applying Own Make-Up for Play)	9
Stage Make-Up Demonstration	9
Stage (Make For Puppets)	3
Stathescope (Make a Model of)	9
Tapestries (Making)	3
Theatre (Applying Own Make-Up)	15
Theatre (Construction of Rocket Prop)	15
Theatre (Stage Make-Up Demonstration)	15
Theatre (Writing a Musical Production)	15
UNICEF Advertising	12
UNICEF Collecting Labels	12
UNICEF Company Formation	12
UNICEF Lunch Clean-up	12
UNICEF Lunch (Cooking)	12
UNICEF Lunch Menu	12
UNICEF Lunch Production Line	12
UNICEF Lunch (Shopping for)	12
UNICEF Trick or Treat	12
Volcano (Making A)	4
Voting Booth	2

ACTIVITIES - GRADES 5-6

	UNIT NO.
Wall Hangings (Making)	3
Water (Experimenting with Beans Showing Necessity of Water)	4
Water Pressure	4
Water Wheel (Construct A)	4
Weather Information - Card File	4
Weather Instrument - Anemometer	4
Weather Instrument - Barometer	4
Weather Instrument - Hair Hygrometer	4
Weather Instrument - Wind Vane	4
Weaving (Looper-Weaving Loom)	3
Weaving (Making an Inkle Loom)	3
Weaving (Making a Waffle Weave)	3
Wood Objects (Making Keychains, Pencil Holders, ETC.)	3